Strategic airline alliances and restrictions of competition by object under EU competition law

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Abstract

In this thesis, the question is asked whether, in the light of the 'more economic approach' adopted in recent years, it is correct to classify metal-neutral revenue-sharing airline alliances as restrictive of competition by object and interpret this concept in a wider sense under Article 101(1) TFEU. By relying on the example and analysis of airline alliances and in particular metal-neutral revenue-sharing alliances, the thesis argues that the 'orthodox' or wider interpretation of restriction by object is correct and, as such, does not contradict the idea behind the more economic approach of EU competition law. However, the analysis of restriction by object has to take into account the effects of Article 101 TFEU as a whole, including Article 101(3) TFEU. Therefore this wider interpretation of object restrictions must be complemented by a realistic application of Article 101(3) TFEU, in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs. This is a legal thesis. It will review the EU competition law approach to airline alliances and use the example of airline alliances to explore the issue of restriction by object and its interaction with Article 101(3) TFEU. The thesis examines both from an economic and legal point of view all those aspects of strategic alliances, air transport and strategic airline alliances that are essential for a thorough understanding of their characteristics when analysed under Article 101(1) and 101(3) TFEU. The research question concentrates on the dichotomy of Article 101 TFEU, and it is concluded that the experience of the aviation industry supports the thesis.

Contents

1 Introduction

1.1 Background of the research and the thesis question

In his 2005 book,[1] Okeoghene Odudu makes reference to a speech delivered by Richard Whish at a conference in June 1997[2] where he declared that 'the debate about what is meant by a restriction of competition under Article [101(1) TFEU] has been with us for 30 years, but I do not believe we are any closer to an acceptable solution to this central conundrum of competition law'.[3] In 2012, Whish made the same statement at the 'New Frontiers of Antitrust' conference in Paris; the only difference being the number of years mentioned. Remarkably, after nearly 50 years of jurisprudence, EU competition law dwells more than ever on the meaning of 'restriction of competition' and the definitions of 'restriction by object' and 'restriction by effect'.

In order to be caught by the prohibition laid down in Article 101(1) of the Treaty on the Functioning of the European Union (TFEU),[4] an agreement must have 'as [its] object or effect the prevention, restriction or distortion of competition within the [internal market]'.[5] It is settled case law that the alternative nature of that requirement, indicated by the conjunction 'or', leads, first, to the need to consider the precise purpose of the agreement in the economic context in which it is to be applied. 'Where, however, an analysis of the clauses of that agreement does not reveal the effect on competition to be sufficiently deleterious, its consequences should then be considered and for it to be caught by the prohibition it is necessary to find that those factors are present which show that competition has in fact been prevented or restricted or distorted to an appreciable extent'.[6]

In recent years the Court of Justice of the European Union (Court of Justice) has

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1 O Odudu, *The boundries of EC compeition law – the scope of Article 81* (OUP 2006) 97.

2 The Second Workshop on European Competition Law in Florence June 1997.

3 C-D Ehlermann and L Laudati (eds), *European Competition Law Annual - no. 2 European Competition Law Annual 1997 - Objectives of Competition Policy* (Hart Publishing 1997) 461.

4 OJ [2008] C 115/47; With effect from 1 December 2009, Articles 81 and 82 of the EC Treaty have become Articles 101 and, respectively, 102 of the TFEU. The two sets of provisions are in substance identical. For the purposes of this thesis references to Articles 101 and 102 of the TFEU should be understood as references to Articles 81 and 82 of the EC Treaty when applicable.

5 Case 56/65 *Société Technique Minière v Maschinenbau Ulm* [1966] ECR 235, 249.

6 See eg case C-209/07 *Competition Authority v Beef Industry Development Society Ltd* [2008] ECR I-8637 (*Beef Industry*) para 15.

handed down a series of judgments that have tried to shed more light on the issues of restriction by object[7] yet these problems remain prominent in the legal literature.[8] Some commentators urge[9] that under the 'more economic approach', EU competition law should also change with regard to the meaning of object restrictions. Further, the concept of restriction by object should be interpreted in a very narrow sense, limited to truly hard-core restrictions without any redeeming virtues. The more economic approach implies a strengthened role for economic analysis, thus a shift in emphasis from the legalistic, form-based assessment to an effects-based economic approach with an increased focus on consumer welfare. Accordingly, it is

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7 Case C-551/03 P *General Motors v Commission* [2006] ECR I-3173; Beef Industry (n 6); case C-8/08 *T-Mobile Netherlands* [2009] ECR I-4529; case C-501/06 P *GlaxoSmithKline Services Unlimited v Commission* [2009] ECR I-9291; case C-439/09 *Pierre Fabre Dermo-Cosmétique SAS* [2011] ECR not yet reported; cases C-403/08 and C-429/08 *Football Association Premier League* [2011] ECR not yet reported.

8 O Odudu, 'Interpreting Article 81(1): object as subjective intention' (2001) 26 European Law Review 60; O Odudu, 'Interpreting Article 81(1): the object requirement revisited' (2001) 26 European Law Review 379; A Jones, 'Analysis of agreements under U.S. and EC antitrust law – Convergence or divergence?' (2006) 51 The Antitrust Bulletin 691 (Jones 2006); O Kolstad, 'Object contra effect in Swedish and European competition law' (2009) Uppdragsforskningsrapport 2009:3, available at: <www.kkv.se/upload/Filer/Trycksaker/Rapporter/uppdragsforskning/forsk_rap_2009-3_object_contra_effect.pdf> accessed 31 December 2012; O Odudu, 'Restriction of competition by object – What's the beef?' (2009) 8(1) Competition Law Journal 11; V Cerulli Irelli, 'Article 81(1) EC: some remarks on the notion of restriction of competition' (2009) 20 European Business Law Review 287; A Jones, 'Left behind by modernisation? Restrictions by object under Article 101(1)' (2010) 6 European Competition Journal 649 (Jones 2010); A Jones, 'The journey towards an effects-based approach under Article 101 TFEU – the case of hardcore restraints' (2010) 55 The Antitrust Bulletin 783 (Jones 2010 Antitrust Bulletin); A Gerbrandy, 'Case C-8/08, T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV, Vodafone Libertel NV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit, Judgment of the Court of Justice (Third Chamber) of 4 June 2009' (2010) 47 Common Market Law Review 1199; E Loozen, 'The application of a more economic approach to restrictions by object: No revolution after all (T-Mobile Netherlands (C-8/08))' (2010) 31 European Competition Law Review 146; A Andreangeli, 'From Mobile Phones to Cattle: How the Court of Justice is Reframing the Approach to Article 101 (Formerly 81 EC Treaty) of the EU Treaty' (2011) 34 World Competition 215; S King, 'The object box: law, policy or myth?' (2011) 7 European Competition Journal 269; L Kjølbye, 'Escaping effects analysis: the Commission's new approach to restrictions by object' (2011) CPI Antitrust Journal 2 (Kjølbye 2011); D Bailey, 'Restrictions of competition by object under Article 101 TFEU' (2012) 49 Common Market Law Review 559 (Bailey 2012); MR Mahtani, 'Thinking outside the object box: an EU and UK perspective' (2012) 8 European Competition Journal 1.

9 See, for example, Jones 2010 (n 8); Jones 2010 Antitrust Bulletin (n 8); Jones 2006 (n 8); Nazzini 2006 (n 8); Kjølbye 2011 (n 8); AP Reindl, 'Resale Price Maintenance and Article 101: developing a more sensible analytical approach' (2011) 33 Fordham International Law Journal 1300; D Gerard, 'Effect-based enforcement of Article 101 TFEU: the "object paradox"' (Kluwer Competition Law Blog, 17 February 2012) available at: <http://kluwercompetitionlawblog.com/2012/02/17/effects-based-enforcement-of-article-101-tfeu-the-%E2%80%9Cobject-paradox%E2%80%9D/> accessed 31 December 2012; D Gerard, 'The effects-based approach under Article 101 TFEU and its paradoxes: modernisation at war with itself?' (Ten years of the effects-based approach in EU competition law, Brussels, 27-28 October 2011); H Zenger, 'Theories of harm: Conception, reliability and selection' (Ten years of the effects-based approach in EU competition law, Brussels, 27-28 October 2011).

argued that EU competition law should move away from the extensive use and wide interpretation of restriction by object and rely more on the insights provided by current economic thinking and effect analysis through restrictions by effect. This should enhance the efficiency of the European enforcement regime and decrease its error costs.

However, in an era where Regulation 1/2003[10] introduced a system of legal exception, self-assessment and the decentralised application of Article 101 TFEU in its entirety, one might also argue that the legal distinctions of restriction by object or effect and the separate roles of Articles 101(1) and 101(3) TFEU have lost much of their significance. Undertakings are, or at least should be, well aware of the cartel prohibition due to its straightforward nature; and should know that this is the main priority of all competition authorities. As regards other relationships, eg horizontal cooperations, undertakings are indifferent to the legal qualification of their conduct; all they care about is the antitrust risk it represents and how this can be handled swiftly. Nevertheless, these seemingly theoretical questions can be decisive from an enforcement efficiency point of view due to the allocation of the burden of proof in competition cases and the bifurcated nature of Article 101 TFEU. Under Article 2 of Regulation 1/2003, the burden of proving an infringement of Article 101(1) TFEU is on the party or authority alleging the infringement, while the other side must prove the benefit of Article 101(3) TFEU if it wants to argue the inapplicability of the general prohibition of Article 101(1) TFEU.

In theory, decision-makers can commit two types of error (administrative inefficiency) when examining the conduct of market participants. Firstly, they can prohibit behaviour that is pro-competitive and beneficial for consumers. This is known as a 'false positive', or 'type I' error (over-enforcement). Secondly, they can erroneously permit behaviour that produces harmful effects on the market, which is called a 'false negative' or 'type II' error (under-enforcement). Each jurisdiction tries to minimise the possibility of false positives or false negatives. As Frank Easterbrook puts it: 'the legal system should be designed to minimize the total costs of (1) anticompetitive practices that escape condemnation; (2) competitive practices

[10] Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1.

that are condemned or deterred; and (3) the system itself".[11] Although opinions can differ as to which error is most undesirable,[12] ideally both should be avoided at low administrative costs.

Depending on the scope of Articles 101(1) and 101(3) TFEU and how their respective elements, such as restriction by object, are interpreted, the administrative burden arising out of their application may contribute to administrative errors. The risk of type I errors, or false positives, increases if the conditions of Article 101(1) TFEU can be proven easily, that is to say where the scope of object restrictions are interpreted widely, while Article 101(3) TFEU requires a very high standard of proof for an efficiency defence to succeed. In contrast, type II errors (or false negatives) can occur when Article 101(1) TFEU becomes the centre of discussion. This can lead to situations when competition authorities become lost in endless debates on the economic models of the theory of harm. The latter scenario also means that Article 101(3) TFEU plays a less important role in the assessment. The correct interpretation of a restriction by object, as one of the elements of Article 101(1) TFEU, plays an important role in this equation and one always needs to keep in mind the overall costs and the effects of each element on the effectiveness of the enforcement regime of Article 101 TFEU.

In 2010, the European Commission adopted a commitment decision in its investigation of *British Airways, American Airlines and Iberia*. The cooperation of these oneworld alliance parties was found to be a restriction of competition by object in the preliminary assessment.[13] In the 2004 investigation of *Air France/Alitalia* which preceded the oneworld decision, the Commission had also concluded that the agreement had the object of restricting competition although applied the power it then had to grant an individual exemption to the cooperation.[14] Both agreements had potential for efficiencies that can be acknowledged under Article 101(3) TFEU. The airlines' cooperation clearly went beyond simple naked restrictions that have no positive effects, ie the concept of restriction by object was widely interpreted. Critics

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11 FH Easterbrook, 'The limits of Antitrust' (1984) 63(1) Texas Law Review 1, 16.

12 See R Whish and D Bailey, *Competition Law* (7th edn OUP 2012) 194 in relation to the preferability of type I or type II errors in unilateral conduct cases.

13 *BA/AA/IB* (Case COMP/39.596) [2010] OJ C278/14 para 33.

14 *Air France/Alitalia* (Case COMP/38.284/D2) Commission Decision 2004/841/EC [2004] OJ L362/17 paras 105-107 and 129.

argue that this approach makes the Commission's life easier and creates increased uncertainty that could lead undertakings to a 'suboptimal form of cooperation',[15] ie create inefficiencies due to fear of false positives.

In this thesis, the question is asked whether, in the light of the more economic approach adopted in recent years, it is correct to classify these airline alliances as restrictive of competition by object and interpret this concept in a wider sense under Article 101(1) TFEU. By relying on the example and analysis of airline alliances and in particular metal-neutral revenue-sharing alliances, the thesis argues that the 'orthodox'[16] or wider interpretation of restriction by object is correct and, as such, does not contradict the idea behind the more economic approach of EU competition law. However, the analysis of restriction by object has to take into account the effects of Article 101 TFEU as a whole, including Article 101(3) TFEU. Therefore this wider interpretation of object restrictions must be complemented by a realistic application of Article 101(3) TFEU, in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs.

1.2 Relevance of the thesis question

As mentioned in the previous section, after nearly 50 years of jurisprudence, the meaning of restriction of competition and in particular restriction by object still generates considerable debate both in the literature and courtrooms. It is notable that there have hardly been any cases that would help understand how the Commission has approached these issues in the last eight years following the introduction of the self-assessment system where public enforcement capacities are mainly concentrated on the fight against hard-core cartels and serious abuses of a dominant position. Although the Commission has adopted several guidelines to provide *ex ante* assistance for undertakings, some degree of uncertainty remains in the absence of published decisions demonstrating in detail the current status of how these concepts are applied. In this regard, therefore, criticisms of the interpretation of EU

15 Kjølbye 2011 (n 8) 6.

16 R Whish, 'Agreements that restrict competition by object: recent case-law' (presentation at Pázmány Péter Catholic University, Budapest 23 March 2010); R Whish, 'Recent Developments in EU and UK Competition Law' (presentation at King's College London, 8 October 2009). By 'orthodoxy', Whish is referring to the strict application of the concept of object, without the possibility of considering any eventual positive effects of a restriction under Article 101(1) TFEU.

competition law may seem well-founded. This is especially true if certain elements of the guidelines seem to be in conflict with Court judgments.[17]

Given the symbiotic relationship of the two main provisions of Article 101 TFEU, uncertainty concerning any element of it may 'contaminate' and distort the use of the other parts. In view of the abolition of exemption decisions under Article 101(3) TFEU, and the related perceived uncertainty regarding whether object restrictions may benefit from its application,[18] there are arguments against object classification and its wider application in EU competition law. However, arguing against object restrictions would be a mistake considering the aspects of efficient enforcement of EU competition rules and the balanced allocation of administrative burdens.

Many of the current views in competition law treat the issues of Article 101(1) and 101(3) TFEU, or even the concepts of restriction by object or effect separately, without taking a holistic view of the interaction of these individual elements and keeping in mind the overall goal of optimal enforcement that realises the goals of competition law.

By focusing on the example of airline alliances, this thesis demonstrates why the wider application of object restrictions seems to be correct and how it should interact with the application of Article 101(3) TFEU in order to achieve the goal of an optimal enforcement regime. Although the examples and explanations in this research are sector-specific and related to aviation, the conclusions can be interpreted in a more general sense, and are relevant to the general approach of EU competition law, thereby providing an answer to the critical voices.

1.3 Scope and subject matter of the research

This is a legal thesis based on the analysis of relevant treaties, legislation, case law, decisional practice of the EU Commission and related literature with regard to competition law and air transport law. The thesis will review the EU competition law

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17 SB Völcker, 'Case law: Joined cases C-501, 513, 515 & 519/06 P, GlaxoSmithKline Services Unlimited v Commission, Judgment of the Court of Justice (Third Chamber) of 6 October 2009, [ECR] I-9291' (2011) 48 Common Market Law Review 175, 185.

18 Bailey 2012 (n 8) 598. See also R Whish, 'How efficient are the EU competition rules at analysing efficiencies?' (lecture at DG Competition, Brussels, 26 November 2012); Jones 2010 (n 8).

approach to airline alliances and use these alliances as examples to explore the issue of restriction by object and its interaction with Article 101(3) TFEU. The research will concentrate on the dichotomy of Article 101 TFEU, and examine whether experience of the aviation industry supports the thesis, and how this fits with the more economic approach. However, the thesis does not intend to discuss, in great detail, the general literature of Articles 101(1) and 101(3) TFEU, nor the detailed specificities of an optimal enforcement regime. The thesis will approach these issues utilising the examples of airline alliances, and only consider them to the extent necessary.

When analysing whether an agreement has as its object the restriction of competition, it is necessary to examine both its precise purpose and the legal and economic context in which it is to be applied. These latter aspects are also relevant for the assessment under Article 101(3) TFEU. Therefore the analysis will include an assessment of strategic alliances in general both from an economic and competition law point of view. The section on economic aspects aims to explain the definition of strategic alliance, the ideas behind alliance formation and the types of alliances. This section serves only to understand the topic for the purposes of applying competition law and is not intended to provide any economic analysis. In addition, the descriptions in Chapter 4 on the legal and economic background of air transport and in Chapter 5 on strategic alliances in the aviation industry again are intended only to familiarise the reader with the purpose and legal and economic context of these cooperations. It is necessary to include economic analyses, and a review of the economic literature in the thesis as these are highly relevant for understanding the particular reasons behind the legal conclusions. Nevertheless this does not change the legal nature of the thesis.

Finally, this thesis also discusses the experience of other jurisdictions, in particular the US, Australia and certain individual EU Member States. However, the main focus of the thesis is EU competition law and concepts specific to EU competition rules. Any reference to the case law of other jurisdictions either illustrates issues that have not been yet examined in EU competition law or highlights similarities. In Chapter 6, the more detailed discussion of the US ‘per se’ and ‘rule of reason’ approaches proves important to provide useful insights for the purposes of analysing

the object and effect dichotomy in EU competition law.

1.4 Structure of the thesis

This thesis seeks to answer the question of whether, in the light of the more economic approach, it is correct to classify airline alliances as restrictions of competition by object under Article 101(1) TFEU. In providing an answer to this question, the thesis follows the structure below.

This thesis comprises seven chapters. This first chapter is intended as a simple introduction to present the thesis question, explain its relevance and define the scope of the thesis according to the above-mentioned conditions.

Chapters 2 to 5 describe both from an economic and legal point of view all those aspects of strategic alliances, air transport and strategic airline alliances that are essential for a thorough understanding of their characteristics when analysed under Article 101(1) and 101(3) TFEU. These chapters are necessary for the discussion in Chapter 6 which brings together all the relevant factors that need to be considered when concluding the competition law assessment of airline alliances.

Chapter 2 introduces airline alliances as a form of cooperation by describing the history and current status of the largest airline alliances: Star, oneworld and SkyTeam. The aim of the chapter is to familiarise the reader with the real world phenomenon that is discussed throughout the thesis and to demonstrate the significance of airline alliances.

Chapter 3 presents a general overview of strategic alliances from an economic and legal point of view. It will discuss what is meant by a strategic alliance, why companies choose to create such alliances, and the different types of alliances in operation. Emphasis will be placed on alliances between competitors, which are the most relevant to competition policy analysis. The competition law discussion will also briefly address the issue of whether strategic alliances represent something new or different for competition law or, alternatively, whether they can be handled by the traditional competition law concepts.

Chapter 4 presents a suitably detailed overview of the most important legal and

economic issues of air transportation. This is because understanding strategic airline alliances also requires knowledge of the special legal and economic background that characterises the airline industry. This chapter discusses the fundamentals of international law relating to air transport before considering US deregulation and EU liberalisation of aviation and comparing the reasons, processes and effects of each. This thesis pays particular attention to the current regulatory regime operating within the EU and considers the common external EU aviation policy and its ability to achieve liberalisation on a global scale. The final part of the chapter will briefly consider the most important economic rules of air transport and explain them at a basic level.

The discussion contained within Chapters 3 and 4 provides the necessary platform on which to consider strategic airline alliances. Chapter 5 will answer questions regarding the industry background of alliance creation, which airlines choose to create alliances and why, and what forms these alliances take. In this part this thesis classifies, explains and illustrates - with reference to real-life alliance examples - the evolution and motivations behind co-operations and the factors of their success. It will also include the current trends facing the airline industry which potentially have a serious impact on airline alliances. Low-cost airlines, for example, offer a different solution to the challenges of airline economics.

Chapter 6 is dedicated to the analysis of airline alliances under EU competition law, which constitutes the main part of the thesis. Although this part takes the form of only one chapter, in terms of the extent of the discussion and the topics covered it is much more important. Chapter 6 begins with an overview of the issues of market definition that have a fundamental effect on both the assessment of competitive harm under Article 101(1) TFEU and the evaluation of potential efficiency benefits under Article 101(3) TFEU (section 6.1). This section also discusses the experience of both the antitrust and merger cases in the aviation industry.

Section 6.2 discusses Article 101 TFEU. It first considers the individual conditions of Article 101(1) TFEU, such as agreement between undertakings and appreciability (sections 6.2.1-6.2.2). It then proceeds to examine restrictions of competition (section 6.2.3) by first describing the meaning and case law of restriction of competition followed by an overview of the relevant literature. The more economic

approach and its meaning for EU competition law is then introduced (section 6.2.3.1).

The part on administrability of efficient antitrust enforcement systems explains how the more economic approach is intended to contribute to the overall efficiency of competition law regimes and the goal of minimising error costs at affordable expense (section 6.2.3.2). It sets out the administrative errors that can arise from the inefficient design and application of competition rules, followed by a short overview of an ideal system. This part also presents the solutions offered by US antitrust law in achieving the aim of minimising administrative errors with the development of the per se versus rule of reason distinction. Although the US experience has limited direct relevance for the application of EU competition rules, it provides an excellent illustration of the most important factors and their interaction.

The part on EU aspects analyses the structure and application of Article 101 TFEU in the light of general ideas on administrability and the rich US experience. This helps to identify and emphasise the peculiarities of Article 101 TFEU. It is suggested that the bifurcated nature of Article 101 TFEU and the dichotomy of object and effect restrictions satisfies the needs of an efficient and sufficiently flexible system saving administrative resources if appropriate.

Section 6.2.4 ‘Legal and economic context of airline alliances’ uses the findings of Chapters 3 to 5 to set the framework for analysing airline alliances. It deals separately with the negative effects or possible theories of harm regarding airline alliances, explaining hub dominance, horizontal, vertical effects and multimarket contact issues. It also details the benefits of airline alliances, in particular the relevant supply-side and demand-side benefits.

Section 6.2.5 explains why Article 101 TFEU is relevant for the assessment of airline alliances and why their examination should not take the form of a ‘quasi’ merger analysis within the framework of Article 101 TFEU. Section 6.2.6 concludes the whole analysis of Article 101(1) TFEU by emphasising that airline alliances should be classified as object restrictions which supports the more economic approach and contributes to minimising error costs at reasonable expense. However, this solution should be accompanied by a more realistic application of Article 101(3)

TFEU that takes into account the economic and legal context of the agreement and the sector in question. These arguments are considered in section 6.2.7 of the thesis.

Chapter 7 draws conclusions from the thesis and provides a summary of the findings on the topic area.

2 History and current state of global airline alliances

Air Florida and British Island formed the first international alliance in 1986; although, airline cooperation on a regional basis had already existed before this time.[1] The actual pioneer of today's global alliances was the cooperation between Delta, Swissair and Singapore Airlines from the late 1980s. Since then, airline alliances have continued to develop to the present day, and they shall continue to evolve in the future. This chapter briefly describes the three global airline alliances in existence today: Star Alliance, oneworld and SkyTeam.

This thesis examines whether, in the light of the more economic approach, it is correct to classify airline alliances as restrictions by object and interpret this concept in a wider sense under Article 101(1) TFEU. By exploring the example of airline alliances and in particular metal-neutral alliances, this thesis argues that the wider interpretation of object restrictions is correct and, therefore does not conflict with the more economic approach of EU competition law. In order to better understand the topic and to familiarise the reader with the examples of the discussion in this thesis of Article 101 TFEU, this chapter introduces the three global strategic airline alliances.

2.1 Star Alliance

In 1997, Air Canada, Lufthansa, SAS, Thai Airways and United Airlines established Star Alliance, the first global airline alliance. Since then, it has grown consistently into what is currently the largest airline alliance. In the year of Star's foundation, Brazil's Varig also joined,[2] followed by Ansett Australia,[3] Air New Zealand and All Nippon Airways in 1999. The expansion continued in 2000 by luring the Austrian Airlines and Singapore Airlines from their partnership with Swissair. Star Alliance also pursued further strategic moves with Air Canada's acquisition of Canadian Airlines (a founding member of oneworld) and in securing the second-largest slot holding at Heathrow Airport through British Midland's (bmi) membership.

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1 TH Oum, J-H Park and A Zhang, *Globalization and strategic alliances: the case of the airline industry* (Pergamon 2000) 17.

2 Ceased to be a member in 2007 due to its financial difficulties.

3 Went bankrupt in 2002.

Mexicana entered the alliance in July 2000, only to leave a mere 4 years later.

In 2003, Star Alliance further strengthened its Asian and East Central European network with the addition of Asiana from Korea and Polish national flag carrier LOT. SAS' Spanish subsidiary, Spanair, became a member in 2003 and went bankrupt in early 2012, while US Airways joined in 2004. In the same year, Blue1, Adria Airways and Croatia Airlines joined the alliance as the first regional members. TAP of Portugal, added further coverage to the South American network of Star Alliance in 2005, while South African Airways has had the same effect in Africa since 2006. Following the takeover of Swiss by Lufthansa,[4] it too became a member of the Star Alliance in 2006. Access to the dynamic growth market of China was secured with the acquired membership of Air China and Shanghai Airlines at the end of 2007.[5] Turkish Airlines and Egyptair joined in 2008. One year later, the former SkyTeam member, Continental Airlines, became the 25th member of Star Alliance, followed by Lufthansa subsidiary Brussels Airlines. In 2010, Brazilian airline TAM joined the alliance to make up for the earlier loss of Varig, while Aegean Airlines provided a leading role in Greece.

Recently added members of the alliance include Shenzhen Airlines, Ethiopian Airlines and airlines from Central and South America: AviancaTACA and Copa Airlines from 2012. EVA Air of Taiwan will join Star Alliance later in 2013. Prospective mergers in the aviation industry can further shape membership in Star Alliance. Lufthansa sold bmi to IAG at the end of 2011,[6] while the merger of oneworld member LAN and Star Alliance member TAM will also result in changes, most likely in the form of TAM leaving Star Alliance and the new LATAM joining oneworld.[7]

Some rather profound statistics can be attributed to the Star Alliance: it serves 1 329 airports in 194 countries with a fleet of 4 570 aircraft, carrying 670.58 million

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4 See *Lufthansa/Swiss* (Case COMP/M.3770) [2005] OJ C204/3.

5 Shanghai Airlines left the Star Alliance in 2010 following its merger with SkyTeam's China Southern Airlines.

6 See *IAG/bmi* (Case COMP/M.6447) [2012] OJ C161/2.

7 As of 31 December 2012, TAM is still a Star Alliance member. However choices of the new LATAM are limited most likely to oneworld, due to the decision of the Chilean competition tribunal (Tribunal de Defensa de la Libre Competencia, TDLC) prescribing that they cannot be in the same alliance as AviancaTACA. See case NC-388-11, Decision Nº 37/2011 of the TDLC.

passengers annually, achieving USD 181.83 billion in revenue.[8] The number of daily departures is 21 900 while the member airlines provide jobs to 448 926 employees.[9] Star alliance has a global market share of 24.8% based on global revenue passenger kilometre (RPK); thereby surpassing all rivals.[10]

The basis of Star Alliance is formed by bi- or multi-lateral agreements between member airlines, some of which were concluded long before the formal establishment of Star Alliance itself. In 2008, Lufthansa, United, Air Canada and Continental, which had just left SkyTeam, decided to form a revenue-sharing joint venture for transatlantic services (A++ Agreement). There are also additional agreements between other members. The common feature of all cooperations is the aim of establishing a long-term strategic relationship between the parties, coordinating their commercial, marketing and operational activities while maintaining their distinct corporate identities. Coordination concerns, to varying intensities, the following areas: route and schedule planning; establishing and managing joint marketing, sales, advertising and distribution networks; travel agent commissions; co-branding; code-sharing; pricing, and revenue management; frequent flyer programmes; revenue-sharing; information systems; sharing airport facilities and services. The deepest form of cooperation is the core member's A++ Agreement, which represents a 'metal-neutral' joint venture that coordinates all important competition parameters between the parties. The cooperation aligns all the parties' incentives with the aim of creating a joint route network where sales are made without any preference to any of the parties' services. Parties should treat the services within the network as their own and sell seats accordingly.

Besides these agreements, mergers and takeovers have further cemented the links between the Star Alliance members over recent years. Lufthansa acquired controlling stakes in Swiss, Austrian, and Brussels Airlines, while United merged with Continental.[11] Core members of the Star Alliance enjoy antitrust immunity in the US

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8 <http://www.staralliance.com/en/about/member_airlines/> accessed 31 December 2012, data as of November 2012.

9 ibid.

10 Based on RPKs for 2011, see Airline Business (September 2012) 28.

11 See *Lufthansa/SN Airholding* (Case COMP/M.5335) [2009] OJ C295/11; *Lufthansa/bmi* (Case COMP/M.5403) [2009] OJ C158/1; *LufthansaAustrian Airlines* (Case COMP/M.5440) [2010] OJ C16/11; *United Air Lines/Continental Airlines* (Case COMP/M.5889) [2010] OJ C225/1.

granted by the Department of Transportation (DOT)[12] and, when it was available, received individual exemptions in the EU for a certain period of time for their respective agreements,[13] enabling greater freedom in their co-operation possibilities. The Commission does, however, continue to investigate the latest A++ Agreement between United/Continental, Air Canada and Lufthansa.[14]

Star Alliance claims to deliver upon a number of benefits, including:[15] more flights to more places with better connections. A wider choice of flights with coordinated schedules makes travel smoother, more convenient and efficient. A participant in any member carrier's frequent flyer programme (FFP) can accumulate and redeem air miles on any other member airline's network. Star Alliance locates all services under one roof in dedicated terminal facilities at airports across the world. Star Alliance also offers new products enabling passengers to combine and plan routes through different networks within one product.

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12 eg *United/Lufthansa* (Docket OST-1996-1116), Order 96-5-27; *United/Lufthansa/SAS* (Docket OST-1996-1411), Order 96-11-1; *United/Air Canada* (Docket OST-1996-1434), Order 97-9-21; *United/Air New Zealand* (Docket OST-1999-6680), Order 2001-4-2; *United/Austrian/Lufthansa/ SAS* (Docket OST-2000-7828), Order 2001-1-19; *United/bmi/Austrian/Lufthansa/SAS* (Docket OST-2001-10575 and 11029), Order 2007-9-12; *United/Asiana* (Docket OST-2003-14202), Order 2003-5-18; *United/Lufthansa/SAS/Austrian /bmi/LOT/Swiss/TAP/Air Canada* (Docket OST-2005-22922), Order 2007-2-16; *United/Brussels Airlines/Lufthansa/Air Canada/SAS/ Austrian/bmi/LOT/Swiss/TAP* (Docket OST 2008-0234), Order 2009-7-10; *United/ANA* (Docket OST-2010-0059), Order 2010-11-10; See also the Australian ACCC's authorisation A91036, A91037, A91038, A91039, A91040 of 18 July 2007 on *Singapore Airlines' application on behalf of Star Alliance*; ACCC authorisation A30211, A30212, A30213 of 4 September 2003 on *Air New Zealand's application on behalf of Star Alliance*; or ACCC authorisation A91300, A91301, A91302, A91303, A91304, A91305 & A91306 of 27 June 2012 on *Air New Zealand's application on behalf of Star Alliance*.

13 *LH/SAS* (Case COMP IV/35.545) Commission Decision 96/180/EC [1996] OJ L54/28; *AuA/LH* (Case COMP/37.730) Commission Decision 2002/746/EC [2002] OJ L242/25; see also *LH/SAS/UA* (Cases COMP/D-2/36.201, 36.076, 36.078) Commission notice concerning the alliance between *Lufthansa, SAS and United Airlines* [2002] OJ C181/2, see also C264/3; case CP/1535-01 of the Office of Fair Trading (UK) Notice of consultation issued pursuant to Rule 8(1)(a) of Schedule 1 of the EC Competition Law (Articles 84 and 85) Enforcement Regulations 2001 – 9 August 2002, *Notification by British Midland and United Airlines of their Alliance Expansion Agreement*.

14 See *AC/CO/LH/UA* (Case COMP/39.595), Antitrust: Commission opens formal proceedings against certain members of Star and oneworld airline alliances MEMO/09/168 20/04/2009; see also pending case CT-2011-004 *The Commissioner of Competition v Air Canada, United Continental Holdings Inc, United Airlines Inc, and Continental Airlines Inc* in Canada on the United/Air Canada relation of Star Alliance.

15 Star Alliance – Strategic alliances in aviation (April 2009) – PowerPoint presentations of the Star Alliance, available at: <http://www.staralliance.com/assets/doc/en/press/media-library/pdf/General_Presentation _APR09.pdf> accessed 31 December 2012.

2.2 oneworld

oneworld was the second global alliance to come into existence and was officially established on 1 February 1999 by American Airlines, British Airways, Cathay Pacific, Canadian Airlines and Qantas. Finnair and Iberia joined oneworld later in 1999, while LAN and Aer Lingus became member airlines in 2000. The aforementioned merger of Air Canada and Canadian Airlines meant the latter's departure from the alliance in 2000, while Aer Lingus withdrew in 2007 after revising its corporate strategy. oneworld's network was further extended when American Airlines absorbed the bankrupt TWA in 2001. In April 2007, Japan Airlines, Malév Hungarian Airlines[16] and Royal Jordanian began to offer oneworld services as full members of the alliance. Mexicana and Russian carrier S7 were additions in 2009 and 2010 respectively, while Germany's low fares airline Air Berlin finalised their membership in 2012. Malaysia Airlines started flying as part of the alliance from late-2012. In October 2012, Qatar Airways was announced as the newest airline to join oneworld. India's Kingfisher is also a potential future member but its implementation has been put on hold to give it time to strengthen its financial position, if possible at all.

Compared to the Star Alliance, oneworld serves only 810 destinations in 149 countries by operating 2 381 aircraft. The number of daily departures reaches 8 627 while the number of passengers travelling on member airlines is 324.43 million, producing an annual revenue of USD 105.51 billion.[17] The number of member airlines' employees is 277 500. The global market share of oneworld represents only 15.1%, based on global RPK.[18]

Similar to Star Alliance, oneworld also builds on a network of bi-, tri- or multi-lateral agreements between its members. In 2010, the two European core members of oneworld, British Airways and Iberia merged and continue to operate as separate brands within the IAG holding group.[19]

American Airlines and British Airways did not manage to get antitrust immunity for

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16 In February 2012, Malév went bankrupt.

17 <http://www.oneworld.com/news-information/oneworld-fact-sheets/oneworld-at-a-glance/> accessed 31 December 2012, data as of 3 April 2012 (financial data as of 7 July 2012).

18 Based on RPKs for 2011, see Airline Business (September 2012) 28.

19 *Iberia/British Airways* (Case COMP/M.5747) [2010] OJ C241/1.

their cooperation until 2010, despite making their first application in 1997,[20] followed by a second in 2001.[21] In 2008, American Airlines, British Airways and Iberia decided to form a transatlantic metal-neutral revenue-sharing joint venture which finally led to the authorisation by the DOT in 2010 and the commitment decision of the European Commission.[22] In addition, several bilateral relationships within the alliance were immunised in the US, authorised in Australia or were earlier exempted in Europe.[23]

The agreements themselves are similar in nature: their aim is to coordinate and ultimately integrate commercial and marketing strategies, as well as distribution channels. Elements of these agreements include code-sharing, coordination on pricing, planning, yield management, scheduling, FFPs, ground handling, etc. The deepest form of cooperation, as is the case with Star Alliance, is the cooperation of core members on transatlantic routes, which represent a metal-neutral joint venture that coordinates all important competition parameters between the parties. Similarly, the cooperation aligns all the parties' incentives with aim of creating a joint route network where sales are made without any preference to any of the parties' services. Parties should treat the services within the network as their own and sell seats accordingly.

oneworld displays the same advantages as Star Alliance: namely, global coverage, the potential to earn and redeem miles for/from the FFPs on other airlines' flights, smoother transfer opportunities and an increased availability of airport lounges. Not

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20 *American/British Airways I* (Docket OST-1997-2058), Order 99-7-22.

21 *American/British Airways II* (Docket OST-2001-10387 and 11029), Order 2002-4-4.

22 *American/British Airways/Iberia/Finnair/Royal Jordanian* (Docket OST-2008-0252), Order 2010-7-8; *BA/AA/IB* (Case COMP/39.596) [2010] OJ C278/14.

23 *American/LAN* (Docket OST-1997-3285), Order 99-9-9; *American/Finnair* (Docket OST-2002-12063), Order 2002-7-30; *American/LAN Peru/LAN Airlines* (Docket OST-2004-19964), Order 2005-10-8; *American/Japan Airlines* (Docket OST-2010-0034 consolidated in OST-2010-0059), Order 2010-11-10; *American/Qantas* (Docket OST 2011-0111), Order 2011-11-12 approving the agreement but not granting antitrust immunity;
ACCC authorisation A30202 of 10 May 2000 on *Qantas' and British Airways' application*; ACCC authorisation A30226 and A30227 of 8 February 2005 on *Qantas' and British Airways' application*; ACCC authorisation A91195 and A91196 of 31 March 2010 on *Qantas' and British Airways' application*; ACCC authorisation A91265 and A91266 of 29 September 2011 on *Qantas' and British Airways' application*;
British Airways/Iberia/GB Airways (Case COMP/D2/38.479) [2003], see press release IP/03/1703 of 10/12/2003: Commission approves alliance between BA and Iberia; the Commission also closed by comfort letter its investigations into agreements involving Aer Lingus and British Airways, Finnair and American Airlines. See XXXIIIrd Report on Competition Policy (2003) (European Commission 2004) 42, Brussels, 04/06/2004 SEC (2004) 658 final.

surprisingly, oneworld also developed similar fare products, like the round-the-world fares allowing multi-sector flights on any oneworld carrier in a specific continent.

2.3 SkyTeam

SkyTeam was the latest of the three alliances to launch. Founding members Air France, Delta, Korean Air and Aeromexico revealed their plans concerning SkyTeam in mid-1999, but it was not until 2000 that the parties formally launched the alliance.[24] The following year, CSA Czech Airlines entered the alliance to fill the network gap existing in Central and Eastern Europe, while the addition of Alitalia brought 869 additional daily flights to 21 new destinations in six additional countries. From the beginning, it was apparent that SkyTeam would need further strong partners from the main revenue generating geographic regions of world aviation (ie North America, Europe and Asia).

In 2003, Air France initiated merger talks with KLM and received approval of the transaction in early 2004.[25] Subsequently, the KLM/Northwest-led Wings alliance joined SkyTeam in September 2004. The alliance between KLM and Northwest was the oldest and the most closely integrated airline alliance of its time. The relationship between the two airlines dates back to 1989, while the cooperation as an alliance began in 1993 when they received antitrust immunity.[26] Their joint venture on the North Atlantic routes served as a template for all subsequent alliances. Continental and Kenya Airways also chose to join SkyTeam due to their close ties with the earlier KLM/Northwest cooperation. As previously mentioned, Continental left SkyTeam in 2008.

In 2006, Russia's Aeroflot became a full member of SkyTeam, providing unrivalled coverage within the earlier CIS states, while in 2007 China Southern entered as SkyTeam's first member from the Chinese market. In the same year, Air Europe of Spain, attained membership. In 2008, two SkyTeam members, Delta and Northwest

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24 Air France and Delta already had a loose agreement on code-sharing, FFPs, aligning of networks and ground handling – Commission notice concerning the alliance agreements between *Air France and Continental* (Case IV/36.314) and *Air France and Delta Air Lines* (Case IV/36.315) [1998] OJ C325/2.

25 *Air France/KLM* (Case COMP/M.3280) [2004] OJ C60/5.

26 *Northwest Airlines/KLM* (Docket 46371), Order 93-1-11.

merged to create the largest commercial airline in the world.[27] Over recent years, SkyTeam has significantly increased its membership, with the addition of Romanian airline TAROM and Vietnam Airlines in 2010, followed by China Eastern, Shanghai Airlines and China Airlines in 2011 and, furthermore, Aerolinas Argentinas, Middle East Airlines from Lebanon, Saudi Arabian and Garuda Indonesia in 2012.

SkyTeam serves 1 000 destinations in 187 countries with 4 137 aircraft, carrying 552 million passengers annually.[28] The number of daily departures has increased to 15 465 and the number of employees now equates to 436 007.[29] Its global market share amounts to 19.6% based on global RPK.[30]

The bilateral or multilateral agreements between members include coordination on pricing, revenue management, seat inventory, network management and scheduling, marketing, sales and advertising, code-sharing, integration of FFPs, joint procurement, ground handling, airport facilities, ticketing, information technologies and distribution programs. In 2008 Delta, Air France/KLM and Alitalia created SkyTeam's metal-neutral profit-sharing transatlantic joint venture, thereby integrating all their activities on the Europe/North America markets and aligning the incentives of its members. This cooperation is the deepest form of integration between airlines, just as in the case of the similar oneworld and Star Alliance joint ventures. A further similarity to Star and oneworld is that several relationships within the SkyTeam alliance have been the subject of regulatory review on both sides of the Atlantic.[31]

SkyTeam accentuates in its publication on benefits the possibility of: earning and

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27 *Delta Air Lines/Northwest Airlines* (Case COMP/M.5181) [2008] OJ C281/3.

28 <http://www.skyteam.com/en/About-us/Press/Facts-and-Figures/> accessed 31 December 2012, data as of 21 November 2012.

29 ibid.

30 Based on RPKs for 2011, see Airline Business (September 2012), 28.

31 *Delta/Air France/Alitalia/Czech Airlines* (Docket OST-2001-10429), Order 2007-5-16; *Delta/Korean Air Lines/Air France/Alitalia/Czech Airlines* (Docket OST-2002-11842), Order 2002-6-18; *Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines* (Docket OST-2004-19214), Order 2006-2-1; *Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines* (Docket OST-2007-28644), Order 2008-5-22;
Air France/Alitalia (Case COMP/38.284/D2) Commission Decision 2004/841/EC [2004] OJ L362/17; *Air France, Aeromexico, Czech Airlines, Delta Air Lines, Korean Air (SkyTeam)* (Case COMP/37.984) closed on 23 January 2012; *AF-KL/DL/AZ* (case COMP/39.964) initiated on 23 January 2012; see also press release IP/12/79 of 27/01/2012 Antitrust: Commission opens a probe into transatlantic joint venture between *Air France-KLM, Alitalia and Delta* and closes proceedings against eight members of SkyTeam airline alliance.

redeeming miles across the whole SkyTeam network; increasing the number of available airport lounges; offering a new and wider range of fare options; enhancing flight connections; and providing travel information from common ticket offices.

2.4 Summary

This chapter briefly described the three global airline alliances: Star Alliance, oneworld and SkyTeam. In numbers the three groupings are as follows:

	Star Alliance	oneworld	SkyTeam
Destinations/countries served	1 329/194	810/149	1 000/187
Fleet	4 570	2 381	4 137
Annual passengers (m)	670.58	324.43	552
Daily departures	21 900	8 627	15 465
Employees	448 926	277 500	436 007
Global RPK share (%)	24.8	15.1	19.6

Table 2.1 Summary table of alliances

Global airline alliances are generally based on a network of bilateral or multilateral agreements between the member airlines, covering most of their activities. This includes coordination of pricing, revenue management, seat inventory, network management and scheduling, marketing, sales and advertising, code-sharing, integration of FFPs, joint procurement, ground handling, airport facilities, ticketing, information technologies and distribution programs. All three global airline alliances created either revenue or profit-sharing metal-neutral joint ventures between core members concerning their transatlantic routes. The latter practice has, recently, also extended to transpacific markets,[32] EU-Japan markets[33] and the transborder US-Canada markets.[34]

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32 See United/ANA and American/JAL cooperations.

33 See British Airways' planned cooperation with JAL. Press release of February 8, 2012 IAG 01/2012, available at: <http://www.iairgroup.com/phoenix.zhtml?c=240949&p=irol-newsArticle&ID=1658196&highlight=> accessed 31 December 2012.

34 See case CT-2011-004 *United/Air Canada* before the Canadian Competition Tribunal.

Alliances profess to facilitating numerous benefits, including: better flight connections, a greater possibility for earning and redeeming miles on all members FFPs, more destinations, more flights, new and innovative fare products enabling global travel, and better airport facilities.

The abovementioned 3 global alliances provide the examples for the analysis of Article 101 TFEU. Understanding their history, background and development, which has been the purpose of this chapter, assists in substantiating the discussion which follows.

3 Strategic alliances in general

In Chapter 2, this thesis briefly described the history and development of the three global airline alliances, ie the most important strategic alliances in the airline industry. The full understanding of airline alliances first requires a general overview of strategic alliances. Consequently, the main purpose of this chapter is to familiarise the reader with the economic theory and the competition law aspects of strategic alliances. In the first part of the chapter, the concept of strategic alliances in economic literature, the motives and objectives behind them is discussed and a commonly accepted classification of what a strategic alliance entails is set out. The second part presents some of the basic issues raised under EU competition law.

This thesis asks whether, in light of the more economic approach, airline alliances can be classified as object restrictions by interpreting this concept in a wider sense under Article 101(1) TFEU. By a detailed analysis of airline alliances, this thesis argues for the wider interpretation of restriction by object and do not identify any contradiction with the more economic approach of EU competition law. This chapter will present the economic and legal context of strategic alliances in general. This reveals the general purpose of alliance agreements and explains whether the economic environment really induces undertakings to cooperate with their competitors. The conclusions of this chapter are relevant both for the analysis under Article 101(1) TFEU and, more importantly, for the scrutiny of efficiency claims under Article 101(3) TFEU. The generally beneficial goals pursued by alliances, and the non-hostile, neutral legal approach of EU competition law explains why even an object classification should not prejudice the assessment of strategic alliances. These goals and approach also explain why arguments for efficiencies should be openly discussed under Article 101(3) TFEU. The chapter also explains why strategic alliances, as defined in this thesis, are primarily a concern for Article 101 TFEU rather than for the EU Merger Regulation (EUMR).[1]

[1] Council Regulation (EC) 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1 (EUMR).

3.1 Strategic alliances: an economic perspective

3.1.1. Concept of strategic alliances

There is no uniform definition of a strategic alliance. Some people even say that strategic alliance is nothing more than a fashionable word invented by consulting companies.[2] Strategic alliance is a specific kind of inter-firm relationship that can take a variety of forms, ranging from an arm's length contract to a joint venture.[3] The concept of strategic alliances has gone through changes over the years. In the mid-1980s, researchers restricted the concept to joint ventures with legal entity and independence from the partner companies.[4] Later, the concept was extended to encompass lasting partnerships between competitors, without any reference to the legal form chosen. In today's widely accepted view, a strategic alliance is a lasting cooperation between competitors or undertakings operating on different markets, and based on mutual benefits.[5] As has been proposed by various researchers,[6] a strategic alliance can be said to have the following distinguishing characteristics:

- Two or more entities unite and agree to pursue an important set of goals, while remaining independent subsequent to the formation of the alliance;
- The partners share both the benefits of the alliance and control over the performance of assigned tasks during the lifetime of it; none of the partners have sole control over the other, although they do influence each other;
- The partners contribute, on a continuing basis, towards key strategic areas; the relationship is not transactional and they each address the challenges of

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2 AR Fiebig, *Strategische Allianzen und ihre Herausforderungen an das Wettbewerbsrecht der Europäischen Union (Dissertation)* (Peter Lang Verlag 1996) 6.

3 S Wahyuni, *Strategic alliance development: a study on alliances between competing firms (Dissertation)* (Rijksuniversiteit Groningen 2003) (Wahyuni 2003) 2.

4 E Tari, *Stratégiai szövetségek az üzleti világban* (Közgazdasági és Jogi Könyvkiadó 1998) (Tari 1998) 19.

5 ibid 19-20.

6 Wahyuni 2003 (n 3) 19-20; and RJ Mockler, *Multinational Strategic Alliances* (John Wiley & Sons Ltd 1999) (Mockler 1999) 2; MY Yoshino and U Srinivasa Rangan, *Strategic alliances: an entrepreneurial approach to globalization* (Harvard Business School Press 1995) (Yoshino 1995); M Darby, *Alliance Brand: fulfilling the promise of partnering* (John Wiley & Sons Ltd 2006) 15-16; WW Suen, *Non-cooperation: the dark side of strategic alliances* (Palgrave McMillan 2005) 3.

incomplete contracts, ie agreements which cannot be written to specify all future scenarios.

Based on the above, the following distinctive features to define a strategic alliance are adopted:[7]

- A cooperation for mutual benefit, which
- is intended to function for a longer period in the pursuance of strategic aims, and where
- partner companies remain independent.
- Through the contribution of assets or knowledge to the alliance,
- some degree of activity integration is achieved.

Using these characteristics, the interpretation of the concept of strategic alliances in this thesis excludes: (i) mergers, since they represent full control over the acquired company; and (ii) licensing, franchising agreements[8] and traditional sales contracts, due to their 'complete contract' nature.

3.1.2 Motives and objectives of strategic alliances

To understand the popularity of strategic alliances, it is essential to speak about the economic environment and its changes over the last few decades. Markets have become larger and more open as a result of the globalisation. This proved to be both an opportunity and a threat to undertakings that had only previously operated at a national level. Competing in a global economy requires a larger scale and scope of operations. Decreasing communication and transport costs cause a convergence of consumer needs. Diseconomies of large firms drive companies to outsource businesses which are not related to the core business of the firm and specialise themselves in their core business. Competition is more dynamic owing to rapid technological development. Shorter product life cycles and increased R&D costs

7 Tari 1998 (n 5).

8 Except when there is continuing contribution and control among two or more independent firms. Mockler 1999 (n 6) 5.

force companies to engage in joint R&D and to share scarce resources.[9] In parallel, the complexity of both R&D and production technologies increases, to the extent that companies are often unable to cope on their own. Finally, many of the (new) markets are characterised by network effects. In these markets, competition involves the attaining the critical mass before your rivals do the same.

Companies need to react quickly in this unpredictable market environment. They can develop organically (internal growth), merge with another undertaking (external growth) or cooperate. The latter can take the form of a strategic alliance with the following motives and goals:[10]

1. *Technology, know-how:* through a strategic alliance, undertakings can access technology, knowledge of production processes, knowledge of local culture and markets, and exchange complementary technologies.

2. *Financial asset:* strategic alliances enable risk sharing, economies of scale, faster payback on investment, sharing R&D costs, minimising capital investment, as well as the availability of the partners' financial resources.

3. *Competition:* strategic alliances can help to compete against common competitors, reduce competition, influence structural evolution of the industry, and pre-empt competitors.

4. *Market access:* they enables members to maintain market position, expand internationally, enter markets faster, gain presence in new markets, and overcome foreign government policy and trade barriers.

5. *Access to inputs, outputs and management experience:* they provide access to materials, labour, licenses, distribution channels, brands, international experience and managerial expertise.

6. *Complementary partner resource contribution:* strategic alliances can combine complementary resources, create product diversity, and integrate company operations.

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9 Wahyuni 2003 (n 3) 10.

10 ibid 12.

There are several theories that provide useful insights into strategic alliance formation as a co-operative strategy. These are: the economics theory, game theory, strategic management theory and organization theory.[11]

Economics theory provides four perspectives to the understanding of strategic alliances; these are: market power, transaction cost, agency, and increasing returns theory.

Market power theory: strategic alliances can be used to gain market power, thereby maintaining or enhancing competitiveness and modifying market position.[12] Literature makes a distinction between offensive and defensive coalitions according to the partner's intention in forming an alliance.[13]

Transaction cost theory: Transaction cost (search, information, negotiation, implementation and enforcement costs) can determine the choice between the market and the firm (or, in other words, hierarchy), ie whether an undertaking buys something or produces itself.[14] However, between the extremes of market and firm there are 'hybrid' contracts or forms, which extend beyond traditional market contracts without reaching the other extreme, the hierarchy of firms.[15] Strategic alliances represent transitional cooperation forms, with specific characteristics, between the market and firm.[16] Parties to the alliance agree to handle certain transactions between each other, thereby omitting the market. However, they abstain from integrating their whole activity into one centralised, hierarchical organisation.[17]

Agency theory: this theory is concerned with the ability of principals to ensure

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11 ibid 17-38.

12 Tari 1998 (n 5) 26; J Child and D Faulkner, *Strategies of cooperation: managing alliances, networks, and joint ventures* (OUP 1998) (Child and Faulkner 1998) 17.

13 See SH Hymer, 'The internationalization of capital' (1972) 6 The Journal of Economic Issues 91.

14 RJ Van den Bergh and PD Camesasca, *European Competition Law and Economics* (2nd edn Sweet & Maxwell 2006) (Van den Bergh and Camesasca 2006) 94. See in particular RH Coase, 'The nature of the firm' (1937) 4 Economica 386. See also OE Williamson, *Markets and hierarchies: analysis and antitrust implications* (Free Press 1975).

15 See OE Williamson, *The economic institutions of capitalism: firms, markets, relational contracting* (Free Press 1985).

16 Tari 1998 (n 5) 30.

17 ibid.

that their agents are fulfilling their objectives.[18] The agency theory can be applied in the case of alliances to the possible self-seeking opportunistic behaviour of partners at the expense of the other.

Increasing returns theory: increasing returns theory leads companies to develop dense technological networks and to form alliances to achieve critical mass, in order to become a major player in the market and to attain 'first mover' status.[19]

Game theory can be concerned with the strategies adopted on the market by the market players (undertakings). It allows one to understand when a player shall choose to cooperate or defect (compete). Game theory can explain the reasons behind alliance formation and the conduct firms pursue in alliances as partners.

Strategic management theory relates to the motives behind the formation of alliances, the selection of partners, and the need to achieve integration between partner cultures and systems.[20] Cooperative arrangements can be motivated by risk reduction, economies of scale, technology exchanges, co-opting or blocking competition, government mandated trade or investment barriers, the need of international expansion, or vertical integration.[21] The strategic management theory draws attention to the external and contextual factors which encourage a cooperative strategy.[22]

Organisation theory's most relevant perspective on the aspects of cooperative strategies is the **resource dependence theory.** According to this theory, strategic alliances reduce the uncertainty of obtaining the required resources, whereas joint ventures stabilise the flow of necessary resources, while providing access to the partner's competences, knowledge and resources.[23] When resources and competences are not readily nor sufficiently available to firms, they are induced to

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18 ibid 23.
19 Wahyuni 2003 (n 3) 14.
20 ibid 32.
21 See FJ Contractor and P Lorange, 'Why should firms cooperate? The strategy and economics basis for cooperative ventures' in FJ Contractor and P Lorange (eds), *Cooperative strategies in international business* (Lexington Books 1988).
22 Child and Faulkner 1998 (n 12) 33.
23 Tari 1998 (n 5) 27.

seek cooperation with other firms.[24]

3.1.3 Types of strategic alliances[25]

Although, there are also other ways in which strategic alliances can be grouped, in the following, the classification of alliance between competitors and non-competitors is used.[26]

3.1.3.1 Alliances between non-competitors

Among non-competitor alliances, the first to warrant mention is that of the vertical partnership of suppliers and customers. Strategic alliances in vertical relationships developed as a result of the transformation process of mass production to lean production. Traditional mass production means that the dominant producer has competence over the whole production process and subcontractors are trusted only with simple tasks on a strictly short-term contractual basis.[27]

According to lean production, first applied by Japanese car manufacturers, the whole process of production has to be performed with significantly lower costs, tighter production deadlines and without stocks. The first phase in the development of lean production was the 'just in time' production cooperation.[28] This already represents something beyond the traditional supplier-producer relationship. The next development phase was strategic partnership, based on joint goal setting, mutual risk and competence sharing and consensus.[29] This partnership is intended for a longer period, where suppliers and producers are depending on each other. They share the duties and responsibilities and pursue a continuous exchange of information to achieve cooperation based on trust.

The other area of strategic alliances between non-competitors is the cooperation

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24 Child and Faulkner 1998 (n 12) 34.

25 See in particular B Garrette and P Dussauge, 'Pattern of strategic alliances between rival firms' (1995) 4 Group Decision and Negotiation 429 (Gartette and Dussage 1995); B Garrette and P Dussauge, 'Anticipating the evolutions and outcomes of strategic alliances between rival firms' (1995) 27 International Studies of Management & Organization 104; P Dussauge and B Garrette, *Cooperative strategy: competing successfully through strategic alliances* (John Wiley & Son Ltd 1999).

26 See in more detail Tari 1998 (n 5) 44-45.

27 ibid 82.

28 ibid 83.

29 ibid.

across different sectors. This could be explained by the connection or convergence of different technologies and markets.[30] Another reason could be the companies' effort for diversification or focusing on a particular sector. In the latter case, the creation of a strategic alliance can allow the firm can to 'get rid of' the branches which are not focused on.[31] Finally, the establishment of a strategic alliance, by combining capabilities, can serve the creation of new activities and consumer needs.[32]

3.1.3.2 Alliances between competitors

The existence of an alliance between rival firms is paradoxical: competitors are expected to compete with one another instead of joining forces.[33] This contradiction results in an inherent instability of competitor alliances, which could easily lead to their eventual dissolution. Nevertheless, instability largely depends on the starting point of the alliance and the background of the undertakings. It would, therefore, be a mistake to assert that alliances between competitors are always collusive or, on the contrary, that they would necessarily foster rivalry between the allies.[34] Garrette and Dussauge[35] have identified three types of alliance; their typology is as follows:

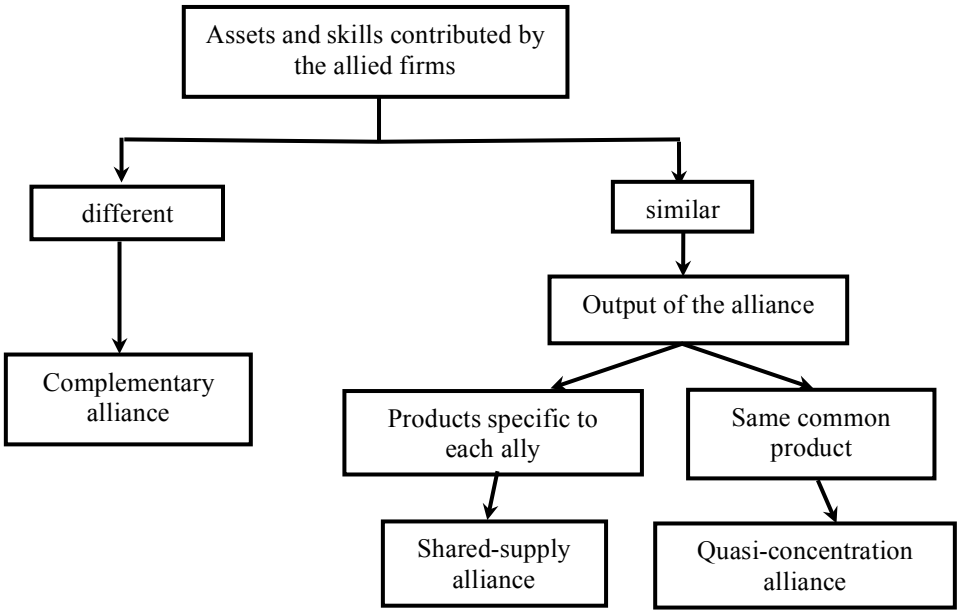

Figure 3.1 Types of alliances

30 ibid 87-89.
31 ibid 91.
32 ibid 91-92.
33 Wahyuni 2003 (n 3) 25.
34 Garrette and Dussage 1995 (n 25) 448-450.
35 ibid 434.

3.1.3.2.1 Complementary alliances

In complementary alliances, the parties contribute different assets or skills so as to take advantage of each of their separate resource pools. Generally they involve the marketing and distribution of an existing product, manufactured by one party that intends to penetrate a new market. Another party to the alliance provides its distribution network or market experience in an attempt to extend the product portfolio of the firm seeking assistance. Within complementary alliances, according to the division of particular tasks, we can distinguish, on the one hand, alliances that facilitate developing capabilities originally contributed by the other partner and, on the other hand, alliances that have no influence on the partners. In the case of the former, alliances often end with one partner taking over the joint business alone or creating its own capability. As a result of the enhanced learning process, the initial complementarity of the parties' capabilities begins to disappear over time.[36] Undertakings party to complementary alliances are usually of different sizes, at least on the market where they cooperate. Complementary alliances generally increase competition; in the long run, the self-supporting entry on the partner's market is possible.

3.1.3.2.2 Shared-supply alliances

Shared-supply alliances involve undertakings that choose to cooperate in order to achieve economies of scale on a particular component or at one stage of a production process.[37] Shared-supply alliances usually include joint R&D but, also, joint purchase or production is possible. When manufacturing common components, it is important to note that the partners appear with different products on the final product's market competing against one another.

Shared-supply alliances are prematurely ended more often than any other type of alliance.[38] Joint production of components or joint R&D can have negative effects on transaction costs, which sometimes outweighs any benefits realised through economies of scale. The automobile industry provides examples. For years, Peugeot, Renault and Volvo jointly designed and produced engines, which were used in cars

[36] Wahyuni 2003 (n 3) 30.
[37] ibid.
[38] ibid.

competing in different markets.[39] Shared-supply alliances do not significantly affect the nature of competition on a given market.

3.1.3.2.3 Quasi-concentration alliances

In quasi-concentration alliances, the partners appear with one common end product on the market, which is the result of joint R&D, production and marketing. They contribute similar assets and knowledge and practically eliminate competition between each other. The motives behind quasi-concentration alliances could be attributed to the need to generate a high amount of investment or to attain economies of scale. There is one important difference between quasi-concentration alliances justified by the size of the project and alliances seeking to create economies of scale. In the latter case, the partners in theory have all the capabilities to rely on their own resources and produce the product independently; while, in the other case, the risk of a project could hinder undertakings from realising it at all. The competitive effect of latter alliance is neutral. On the other hand, quasi-concentration alliances can have anticompetitive effects when the partners have the capability to produce the product independently.

Quasi-concentration alliances are inherently more stable than the other types of alliance. They are rarely finished before the end of the project.[40] The serious commitment on part of the participants, and their unwillingness to go their separate ways, acts to stabilise these alliances.

3.2 Strategic alliances: a competition law perspective

Competition authorities around the world are increasingly faced with the problem of how to define and deal with strategic alliances, regardless whether they mention it expressly in annual reports, decisions or define the concept of a strategic alliance. As early as 1992, the Bundeskartellamt chose the topic 'Strategic alliances – A new challenge for competition policy' for the sixth International Cartel Conference.[41] The Canadian Bureau of Competition Policy issued a policy statement in 1995 to give

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39 Tari 1998 (n 5) 61.

40 Wahyuni 2003 (n 3) 32.

41 See Dr. K Hansen (ed), *Strategische Allianzen – Eine neue Herausforderung für die Wettbewerbspolitik, Dokumentation der Internationalen Kartellkonferenz Berlin 1992* (Bundeskartellamt 1993) (Hansen 1993).

general guidance and clarify its enforcement approach to strategic alliances under the Competition Act.[42] William J. Kolasky Jr.[43] - in a testimony before the Federal Trade Commission[44] - urged for the introduction of antitrust guidelines covering strategic alliances and joint ventures.

In 1994, the EU Commission noted in its XXIVth Report on Competition Policy that '[t]he application of the basic competition rules to strategic alliances has become one of the major challenges for EU competition policy in recent years'.[45] In its 2001 guidelines on horizontal cooperation agreements,[46] under paragraph 12 dealing with the scope of that document, it states:

> 'More complex arrangements such as strategic alliances that combine a number of different areas and instruments of cooperation in varying ways are not covered by the guidelines. The assessment of each individual area of cooperation within an alliance may be carried out with the help of the corresponding chapter in the guidelines.'

In paragraph 3 of the same document, the Commission suggests that:

> 'Companies need to respond to increasing competitive pressure and a changing market place driven by globalisation, the speed of technological progress and the generally more dynamic nature of markets. Cooperation can be a means to share risk, save costs, pool know-how and launch innovation faster.'

In the latest version of the horizontal guidelines, the Commission reiterates:[47]

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42 Strategic alliances under the 'Competition Act' – Director of Investigation and Research, November 1995, available at: <www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/01671.html> accessed 31 December 2012.

43 Former Deputy Assistant Attorney General, United States Depratment of Justice, Antitrust Division.

44 WJ Kolasky, 'Antitrust enforcement guidelines for strategic alliances' in Corporate Law and Practice Course Handbook Series (1998) July-August, Structuring, Negotiating & Implementing Strategic Alliances 499 (Kolasky 1998).

45 XXIVth Report on Competition Policy (1994) (European Commision 1995) 55.

46 Commission notice, guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements [2001] OJ C3/2.

47 Communication from the Commission, guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] OJ C11/1 (horizontal guidelines), para 2.

> 'Horizontal co-operation can be a means to share risk, save costs, increase investment, pool know-how, enhance product quality and variety, and launch innovation faster.'

These are the precise reasons for alliance formation which were mentioned at the beginning of this chapter.

3.2.1 Competition law concept of strategic alliances

The question left unanswered is whether competition authorities treat strategic alliances as a separate competition law concept or whether they just apply their existing framework.

In his speech at the abovementioned cartel conference, Wolfgang Kartte, the former president of the Bundeskartellamt, said that the concept of strategic alliances is trendy and the relationships it describes differ greatly in nature.[48] Nevertheless, he highlighted the following common features of strategic alliances: the partners remain legally independent, and the relationship between the partners is located between the market and hierarchy.[49] What makes strategic alliances particularly noteworthy is the size of the firms and the international dimension. At the same conference, Leon Brittan, the Commissioner responsible for competition policy at that time, suggested strategic alliances were by no means a new concept in EU competition policy:

> 'We have been dealing with this phenomenon for quite a while, even if under different names.'[50]

He stopped short of offering an exact definition of strategic alliances but stated that the problems involved in examining them are just the same as those involved in examining any agreement. Strategic alliances cover a wide range of situations. Others describe strategic alliances as various modes of cooperation between undertakings,[51] or project-oriented cooperation with strategic objectives; generally between large undertakings, which retain their independence despite their close

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48 Hansen 1993 (n 41) 265.
49 By using the terminology of the transaction cost theory.
50 Hansen 1993 (n 41) 265.
51 HH Hollmann, 'Strategische Allianzen: Unternehmens- und wettbewerbspolitische Aspekte' (1992) WuW 293.

cooperation.[52]

The Canadian Bureau of Competition Policy stated that there are no specific provisions within the Canadian Competition Act dealing exclusively with strategic alliances, due to the myriad of corporate forms which these arrangements have taken and could take.[53] The special characteristics of strategic alliances are: the parties' maintained independence, partial integration with the joint pursuit of medium to long term goals, strategic but set time frame, and mutual contribution of assets, knowledge or information.[54] The emphasis is not on the definition of strategic alliances but, rather, on their competitive effects.[55]

Kolasky suggests that, in many respects, strategic alliances are 'simply old wine in new bottles'.[56] He refers to Robert Pitofsky,[57] who defined joint ventures as any kind of collaborative agreement between actual or potential competitors that lies between a cartel and a merger. In this regard, the terms joint venture and strategic alliance are interchangeable synonyms that can be analysed using the same framework.[58]

To summarise, from a competition law enforcement point of view, strategic alliances are not defined separately due to the wide range of forms they can take. That said, enforcers and competition law experts are aware of the problem that strategic alliances raise. Nevertheless, competition authorities apply their traditional assessment frameworks, even if this task proves particularly complicated on certain occasions.

3.2.2 The general approach of the EU Commission

In the early-1990s, the EU internal market programme was close to completion, while liberalisation was also on the global agenda, which inevitably forced undertakings to deal with the situation of more intense competition and a rapidly changing economic environment. In newly liberalised industries, strategic alliances

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52 J Basedow and C Jung, *Strategische Allianzen: die Vernetzung der Weltwirtschaft durch projektbezogene Kooperationen in deutschen und europäischen Wettbewerbsrecht* (Verlag C. H. Beck 1993) 18.

53 Strategic alliances under the 'Competition Act' (n 42), Director's preface.

54 ibid part 2: Inter-firm cooperative arrangements.

55 ibid.

56 Kolasky 1998 (n 44) 505.

57 Former Chairman of Federal Trade Commission.

58 ibid 506.

appeared to be a clever solution to these challenges. The Commission adopted a favourable approach to all forms of cooperation that strengthened the efficiency and, thus, the competitiveness of the parties.[59] In the *BT/MCI case,*[60] the Commission concluded that the relevant market was opening up to world competition because of liberalisation and technological advances. It was, therefore, necessary for firms to adjust to the new environment. The Commission took into consideration the convergence of telecommunication and information technologies, the introduction of new services and products, the rapid globalisation of markets relating to new value-added services and the significant growth in demand.

The general approach to strategic alliances is best described by the Commission in its aforementioned 1994 Annual Report, where it says:[61]

> 'It is not only the individual elements of such cooperation, but also their combined effect on competition which need to be assessed in a dynamic way taking into account both the advantages of strategic alliances and their negative effects on competition between the parties, including the potential spill over from areas of cooperation to other areas of the parties' activities. A strategic alliance may have the impact that the parties no longer want to compete but rather cooperate in general.'

The Commission intends to safeguard the achievements of liberalisation and prevent all agreements which have the same foreclosure effect as the statutory protection that existed prior to liberalisation. Strategic alliances are, therefore, only compatible with competition provisions if they do not shut off their traditional (national) markets.[62] In the 1995 Annual Report, it is expressly stated that:[63]

> […] 'newly emerging markets is not a password for approval. While alliances should be allowed, or even encouraged when pro-competitive, they cannot be accepted where they thwart or threaten the demonopolization process. Where big players join forces, the Commission should aim to prevent market

59 XXIVth Report on Competition Policy (1994) (European Commision 1995) para 17.
60 *BT/MCI* (Case IV/34.857) Commission Decision 94/579/EC [1994] OJ L223/36.
61 Para 156.
62 XXVth Report on Competition Policy (1995) (European Commission 1996) Introduction by Karel van Miert.
63 ibid para 8; See also XXVIth Report on Competition Policy (1996) (European Commission 1997) para 66.

foreclosure.'

Enhanced global competitiveness is not an excuse for the elimination of competition at a national level.[64] These examples show that the Commission applies its existing assessment methods and it is concerned with the same problem as in any other case, namely market power.

3.2.3 Forms of strategic alliances and their treatment

Strategic alliances can take a large variety of forms; however, from an EU competition law perspective they can either qualify as a restrictive agreement under Article 101 TFEU or as a concentration under the EUMR. For the purposes of this thesis, the definition of strategic alliances is taken to include the competition law concept of joint ventures and to exclude 'real' mergers. A joint venture is an arrangement by which two or more undertakings integrate part of their operations and put them under joint control, in order to achieve a particular commercial goal.[65] It requires the creation of either a separate legal entity or, at the very least, a recognisable joint committee or informal organisation clearly identifiable as separate from its parents. In addition, both parents contribute assets, knowledge and personnel to enable the joint venture to carry out its allotted tasks.

3.2.3.1 Strategic alliances, which are concentrations

Given the fact that the merger of previously independent undertakings[66] or the acquisition of sole control over one company by the other[67] are not regarded as strategic alliances, the only relevant provision of the EUMR is Article 3(4):

> 'The creation of a joint venture performing on a lasting basis all the functions of an autonomous economic entity shall constitute a concentration within the meaning of paragraph 1(b).'

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64 See *Atlas* (Case IV/35.337) Commission Decision 96/546/EC [1996] OJ L239/23; *Phoenix* (Case IV/35.617) Commission Decision 96/547/EC [1996] OJ L239/57; XXVIIth Report on Competition Policy (1997) (European Commission 1998) para 71; XXVIIIth Report on Competition Policy (1998) (European Commission 1999) Foreword by Karel van Miert;

65 A Jones and B Sufrin, *EU Competition Law: Text, Cases and Materials* (4th edn OUP 2010) 985.

66 EUMR Article 3(1)(a).

67 EUMR Article 3(1)(b).

The Green Paper on the Review of Council Regulation (EEC) 4064/89[68] notes that, although the Commission is conscious of the possible 'structural' impact of strategic alliances on the markets involved, the difficulty in sufficiently defining them for the purposes of mandatory *ex ante* notification hinders their involvement within the scope of the EUMR.[69] Based on the Commission's experience, strategic alliances are not usually designed to bring about the structural change envisaged under Article 3(1) of the EUMR and may not necessarily result in the creation of a full function joint venture.[70] The Green Paper also highlights that the only strategic alliance assessed under the EUMR was the KLM/Alitalia airline alliance (1999), which suggests that Article 101 TFEU still appears to be the most appropriate legal instrument for assessing such transactions.[71]

Accordingly, the EUMR has limited relevance for the assessment of strategic alliances and applies only where the alliance qualifies as a full-function joint venture.[72] A joint venture must perform, on a lasting basis, all the functions of an autonomous economic entity in an operational respect. The joint venture has to carry out the same functions as any other normal firm operating on the market. It must have a management dedicated to its day-to-day operations and access to sufficient resources including finance, staff and assets in order to conduct, on a lasting basis, its business activities. Joint ventures taking over only partial functions, like R&D, production or distribution are not treated as full-function. Using the typology of strategic alliances, it can be concluded that most of these co-operations do not fulfil the conditions of full-functionality.

3.2.3.2 Strategic alliances as restrictive agreements

If full-functionality is missing from a joint venture, or the transaction does not have Union dimension, then Article 101 TFEU may still have a role in their assessment. In the case of strategic alliances, the existence of an agreement between parties can always be presumed since they are established on a contractual basis. International strategic alliances will also usually satisfy the requirement of having an effect on

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68 COM (2001) 745 final, Brussels, 11/12/2001.
69 ibid para 101.
70 ibid para 113.
71 *KLM/Alitalia* (Case COMP/JV.19) [2000] OJ C96/5.
72 See Commission consolidated jurisdictional notice under Council Regulation (EC) 139/2004 on the control of concentrations between undertakings [2008] OJ C95/1, paras 91-109.

trade between Member States. Consequently, the most important issue would be whether the agreement has as its object or effect the restriction of competition. Should a strategic alliance restrict competition within the meaning of Article 101(1) TFEU, the opportunity would remain to argue that it creates efficiencies within the meaning of Article 101(3) TFEU, which would outweigh the restrictive effects.[73]

In the following, only a few general thoughts on strategic alliances and EU competition law are emphasised. The horizontal guidelines state that horizontal co-operation agreements can limit competition in several ways.[74] The agreement may be exclusive and limit the potential for the partners to compete against each other, or for third parties to do the same. It can also reduce the independence of decision-making, through the contribution of assets or through the affection of financial interests. A horizontal agreement may also increase the likelihood of coordination.[75]

Complementary alliances bear similarities to commercialisation agreements and it is very possible that they can escape the application of Article 101 TFEU. Since the parties contribute different assets or skills to take advantage of the each other's capabilities, the main question from a competition law point of view is whether the strategic alliance is objectively necessary to allow one party to enter the market in question.[76] When alliance formation is led by the desire to access otherwise impenetrable markets, the competitive effect is positive. On the other hand, the assessment shall be negative when the strategic alliance serves as nothing more than a disguise for a collusive practice.[77]

Shared-supply alliances could be classified, for example, as R&D agreements and in most of the cases they do not fall within the scope of Article 101(1) TFEU.[78] They do not influence the parameters of competition since they are 'distant' from the final product market. They involve only one stage of the production process and the partners usually appear on the market with separate products. On the other hand, Article 101(1) TFEU can apply if the cooperation results in significant cost

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73 See, in particular, Communication from the Commission, notice, guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/08 (Article 101(3) guidelines).
74 See horizontal guidelines (n 47) para 33.
75 ibid para 34.
76 ibid para 237.
77 ibid paras 242-245.
78 ibid paras 129-132.

commonalities where R&D represents a considerable part of the undertakings' costs. A strategic alliance in the R&D field can restrict competition by slowing down innovation and may also reduce competition between the parties outside the scope of the agreement or lead to coordination.[79] Still, in the absence of market power, negative effects are rarely anticipated.[80] A shared-supply alliance can also take the form of a joint purchasing agreement or a joint production agreement concerning a particular component. Again, in these cases, the potential negative effects on competition can be limited if the co-operation exists only at this level of the production chain without creating significant cost commonalities,[81] or where there is an absence of market power[82] and other jointly performed functions like commercialisation.

Quasi-concentration alliances can appear in two extremes. Firstly, Article 101(1) TFEU is not applicable if: (i) the alliance is motivated by the huge investment and risk associated with a project, and (ii) none of the participants would be able to undertake the project independently. In the second scenario, it is probable that a strategic alliance restricts competition within the meaning of Article 101(1) TFEU where the parties co-operate in every production phase to produce a common product, although they would have been able to appear independently too. In these joint productions, the partners inevitably cooperate on output and prices and, therefore, Article 101(1) TFEU is applicable.[83]

However, the assessment under Article 101(1) TFEU is only one element of a strategic alliance's analysis. The other side, which is reflected in Article 101(3) TFEU, is the assessment of the positive economic effect of restrictive agreements.[84]

Under the first condition of Article 101(3) TFEU, the agreement should create efficiencies. These benefits have to be objective; efficiencies should not be assessed from the subjective point of view of the parties. The claimed efficiencies should be transaction-specific, verifiable and benefit - in part - consumers. Efficiencies can include cost efficiencies arising from technological leaps, synergies, economies of

79 ibid para 127.
80 ibid para 133.
81 ibid paras 175-180 and 201.
82 ibid paras 165-168 and 202-204.
83 ibid paras 157-161.
84 Article 101(3) guidelines (n 73) para 32.

scale and scope, learning economies, better planning of production, or better capacity utilisation.[85] There are also efficiencies which are qualitative in nature, ie when the quality of the product is enhanced, a new feature is added or where a completely new product/service is created.[86]

Strategic alliances can create substantial efficiencies and, as has been shown, they are partly motivated by the partners' own goal to achieve efficiency, thereby improving their own competitiveness. Strategic alliances can achieve economies of scale relating to indivisibilities, increased dimension, specialisation, massed reserves, and superior organisation or learning effect.[87] Concerning economies of scope, we have seen that strategic alliances are established with the intention of lowering transaction costs, internalising externalities or to ensure important inputs. Economies of R&D include: spreading cost and risk, combining complementary assets, eliminating redundant R&D effort, technology transfer and rent dissipation,[88] which are also mentioned and regarded as motives and goals of alliance formation.

Under the second condition of Article 101(3) TFEU, consumers must at least be compensated for the actual or likely negative impact caused by the restriction of competition and, as such, the net effect should be neutral.[89] It is not required that consumers receive a fair share of every efficiency and compensation can take the form of increased quality in exchange for higher prices. The Commission prefers a cost reduction in variable and marginal costs as opposed to lowering fixed costs. In any case, the incentive to raise prices arising out of an increase in market power must be balanced against the incentive to reduce prices arising from enhancements in efficiency.[90]

Complementary alliances facilitate entry into new markets and, therefore, the pass-on of benefits is rather obvious. Shared-supply alliances very rarely affect the competitive situation on the market of final products; alliance members compete against each other and, therefore, they have an incentive to increase output and lower prices as a result of the efficiency created by the alliance. In the case of quasi-

85 ibid paras 64-68.
86 ibid paras 69-72.
87 Van den Bergh and Camesasca 2006 (n 14) 169-170.
88 ibid 188-190.
89 Article 101(3) guidelines (n 73) para 85.
90 ibid para 101.

concentration alliances, residual competition and elasticity of demand play a decisive role.

Finally, the condition of indispensability and the requirement not to eliminate competition in respect of a substantial part of the products in question depend on the market circumstances of each strategic alliance; no specificities can be identified according to the type of alliance.

3.3 Summary

This chapter has discussed the general economic and competition law perspectives of strategic alliances. In the economic section, it first dealt with the concept of strategic alliances by identifying the main characteristics as follows: a cooperation for mutual benefit, which is intended for a longer period, pursuing strategic aims whilst the partner companies remain independent. A degree of activity integration is achieved via the contribution of assets or knowledge to the alliance. The chapter then examined the motives and objectives of strategic alliance formation, including some theoretical explanations. As for the types of strategic alliances, it used the classification of alliances between competitors and non-competitors. Within the group of competitors' strategic alliances there are three types.

Firstly, complementary alliances bring together undertakings with different assets and skills, allowing each partner to take advantage the complementary skills possessed by the other. Secondly, shared supply alliances entail the co-operation of undertakings with similar assets at one stage of the production process who seek to achieve economies of scale on a particular input. Finally, quasi-concentration alliances are created by undertakings with similar assets who proceed to develop, manufacture and market a common product.

In the competition law section, it was concluded that there is no special definition of strategic alliances in competition law. However, competition authorities are aware of the problem these agreements represent and they try to assess them with traditional competition law concepts. Under EU competition law, strategic alliances rarely qualify as a concentration under the EUMR. In most cases, strategic alliances are examined as restrictive agreements under Article 101 TFEU.

4 Legal and economic background of air transport

This chapter explores the legal and economic background of the industry that serves as a stage for the strategic alliances discussed in this thesis. It assists with the understanding of the topic since the industry characteristics and its historical settings largely influence airline alliances. This chapter first discusses the international law background of air transport, followed by a description of the market opening, the present legal regulatory environment and the external aviation policy of the EU. The chapter concludes by highlighting some of the relevant economic insights of airline operations.

In this thesis, the question is asked whether the more economic approach allows for the wider application of restriction by object and thereby the classification of airline alliances as object restrictions. This thesis concludes that the characteristics of airline alliances support this idea without conflicting with the more economic approach of EU competition law. A detailed discussion of the legal background to air transport is essential for answering the thesis question since the applicable legal regime played a significant role in the transformation of the aviation industry and triggered the course of events leading to alliance formation.

Partial liberalisation and dismantling of legal barriers enabled the emergence of business forms that induced the creation of alliances. The same partial liberalisation and legal restrictions on foreign ownership continue to hinder airlines in merging according to the business rationale that applies in other globalised industries. These restrictions serve as one, but not necessarily the only, reason for the popularity of alliances as a business form.

In this environment, airlines often use alliances to mimic the effects of legally impermissible mergers. Within these revenue-sharing alliances, partners eliminate competition between each other with regard to the all important competition parameters of air transport markets. This is the very feature which requires the restriction by object classification of these agreements. Describing the liberalisation process explains the genesis of true airline competition, while the current regulatory framework assists in understanding the nature of competition allowed between

airlines. The analysis of external EU aviation policy reveals that, despite the considerable progress made in aviation liberalisation, strategic alliances are here to stay for at least in the short and medium term.

The section on the economics underpinning the aviation industry explains the economic rationale of airline cooperation and alliance formation. It presents those economic principles that must be respected by all airlines provided they intend to remain on the market on a long-term basis. The economic characteristics of air transport markets also explain route-specific competition and the nature of competition between airlines. Understanding these relationships is indispensable for any analysis under Article 101 TFEU. Since it is argued that the wider interpretation of object restrictions has to be complemented by a realistic application of Article 101(3) TFEU, the economic insights of aviation are also crucial for the proper analysis of efficiencies. These insights facilitate understanding critics of the Commission's approach to out-of-market efficiencies discussed later (section 6.2.7.1).

Accordingly, the following discussion of the legal and economic background will put into context the issue of strategic alliances which is essential for a robust analysis of the area.

4.1 International law on air transport

4.1.1 The Chicago System

Notwithstanding the military and commercial importance associated with air transport almost from the beginning, the first attempts to create a comprehensive multilateral regime within the industry failed.[1] An incomplete pattern of bilateral agreements evolved between the countries that had airlines and the countries to and from which those airlines wished to fly.[2] The right of innocent passage was acknowledged but landing for commercial purposes was not allowed and depended on the individual authorisation of states.

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1 See Conference Internationale de la Navigation Aerienne, Paris 8 May-28 June 1910. More details in M Milde, 'International Air Law and ICAO' in M Benkő (ed), *Essential Air and Space Law* (Eleven International Publishing 2008) 5-12.

2 R Doganis, *Flying off course, airline economics and marketing* (4th edn Routledge 2010) (Doganis 2010) 28.

In 1944, delegates from 52 countries gathered in Chicago to discuss the possibility of a multilateral agreement on air transport. The economic background of the US and the UK largely explains the outcome of the Chicago conference. The US had the equipment and ambition of creating a global air transport network but, nevertheless, lacked their own airfields around the world.[3] The UK, on the other hand, had airports in each of the colonies but lacked a network to connect their empire, alongside a shortage of suitable aircraft. Under these circumstances, the US called for a multilateral open skies agreement, namely without limitation on market parameters such as tariffs, capacity or routing.[4] The UK stressed that the proposed system should serve the needs of the travelling public and provide parties with a 'fair share' of traffic.[5] The two conflicting approaches resulted in the failure of an extensive multilateral agreement for commercial activities to emerge, which has – to this day – determined the shape of international aviation.

Despite this, the following agreements were reached. The Convention on International Civil Aviation (Chicago Convention)[6] deals with every aspect of commercial aviation, operation of aircraft and air services, both in the air and on the ground. The Convention reaffirms the states' complete and exclusive sovereignty over their airspace and declares an equal right for all signatories to participate in international air transport.[7] The Chicago Convention also set up the International Civil Aviation Organisation, a United Nations specialised agency. Article 6 of the Chicago Convention serves as a basis to the bilateral system, as it prohibits services over or into the territory of a contracting state without the authorisation of that state.[8]

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3 ibid 29.

4 ibid.

5 A Cheng-Jui Lu, *International airline alliances: EC competition law, US antitrust law and international air transport* (Proefschrift) (Universiteit Leiden 2002) (Cheng-Jui Lu 2002) 11.

6 Available at <www.mcgill.ca/iasl/sites/mcgill.ca.iasl/files/chicago1944a.pdf> accessed 31 December 2012.

7 Chicago Convention Article 1.

8 There are nine freedoms of air (traffic rights):
The first two traffic rights are the so-called 'transit rights', which do not provide any commercial opportunities.
- **First freedom:** the right to fly over another country without landing.
- **Second freedom:** the right to land for technical reasons (eg refuelling).
The remaining six traffic rights serve as the basis of commercial air traffic; therefore, they are labelled 'commercial rights':
- **Third freedom:** the right to carry revenue traffic from the home country to the authorising country.
- **Fourth freedom:** the right to carry revenue traffic from the authorising country to the home country.

Article 7 established a general prohibition on cabotage.

Although the maximum exchange of traffic rights failed, an agreement on the two transit rights was reached.[9] This agreement facilitates air services, as the home country of an airline does not need to have bilateral air service agreements with every country among the route flown, just with the country of destination. Consequently, it has only practical importance and, as such, no real commercial relevance.

4.1.2 System of bilateral air service agreements

Based on Article 6 of the Chicago Convention, all commercial aviation activity is dependant on bilateral air service agreements (ASA). These agreements deal with market access, flight frequency, capacity, applicable fares and tariffs. ASAs can be divided in to three major parts.[10] The first part is the bilateral agreement itself. Aside from the administrative provisions, contracting parties use the agreement to determine the method of airline designation (ie which airlines are allowed to fly), the regulation on capacity and the issues concerning tariffs and their approval. Designation used to be single, allowing only one airline from each contracting country to establish air services. An important rule concerning designation, and which still largely determines and distorts the industry structure, is the 'substantial ownership and effective control' requirement. The designated airline should be substantially owned and effectively controlled by nationals of the designating country. As the whole system was governed by the desire for equal rights for all signatories to participate in international air transport, fares and capacity were

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- **Fifth freedom:** the right to carry revenue traffic between the authorising country and third countries when the service starts or ends in the home country.
- **Sixth freedom:** the right to carry revenue traffic with connecting third and fourth freedom services through the home country.
- **Seventh freedom:** the right to carry revenue traffic between two other authorising countries without any connection to the home country.
- **Eighth freedom:** cabotage right, the right to carry revenue traffic on domestic routes in the authorising country as an extension of, or first leg of, a third or fourth freedom service.
- **Ninth freedom:** cabotage right, the right to carry revenue traffic on domestic routes on a standalone basis.

For further details, see ICAO Manual on the Regulation of International Air Transport (2nd edn ICAO 2004) Chapter 4.1 Basic Market Access.

9 International Air Services Transit Agreement (Transit Agreement), available at: <www.mcgill.ca/iasl/sites/mcgill.ca.iasl/files/chicago1944b.pdf> accessed 31 December 2012.

10 Doganis 2010 (n 2) 30-31.

strictly controlled. In terms of fares, parties referred to and applied the IATA[11] tariff fixing mechanisms.

The second part - *annexes* - specifies the routes to be operated within by the designated airlines of each state. Thirdly, every ASA may consist of a 'Memorandum of Understandings' or an 'Exchange of Notes' which allow for the creation of confidential clauses or modifications to the originally adopted document. Early bilateral ASAs were extremely protectionist (the 'predetermination type') and regulated all aspects of air services in a very strict, anticompetitive manner. Only a specified number of routes were to be operated within, fifth freedom services[12] were rarely permitted, each party could designate only one airline, the substantial ownership and effective control rule applied, and capacity was split 50/50 between the operating airlines.[13]

On 11 February 1946, the US and the UK signed an air service agreement at the Bermuda Islands, which has since become known as Bermuda I.[14] Although this agreement still constituted a traditional ASA, it was somewhat more liberal than the predetermination type. It permitted fifth freedom services[15] and imposed no restriction on capacity and frequency. The IATA price fixing system was indicated as a favourable method for determining prices.[16] For many years, this agreement served as a template in civil aviation. A network of approximately 3 500 - 4 000 bilateral ASAs became the legal basis of international commercial aviation.[17] Remarkably, some 30 years after Bermuda I, the US and UK entered into a new and much more restrictive ASA that regulated air transport services between them until 2008.[18]

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11 International Air Transport Association.

12 See n 8.

13 R Doganis, *The airline business in the twenty first century* (2nd edn Routledge 2006) (Doganis 2006) 29.

14 ibid 14. See also <en.wikisource.org/wiki/Bermuda_Agreement> accessed 31 December 2012.

15 Annex III of the Bermuda Agreement.

16 ibid Annex II.

17 According to IATA, some 3 500 - 4 000 bilateral are in force around the world (2012 figure). See Agenda for Freedom initiated by IATA, <www.agenda-for-freedom.aero/Pages/faq.aspx> accessed 31 December 2012.

18 Available at: <airlineinfo.com/treaties/unitedkingdom7.pdf> accessed 31 December 2012.

4.1.3 Multilateralism in international air transport

Although bilateral ASAs dominate the landscape of international air transport in the Chicago system, the seeds of multilateralism already appeared at the time of the Chicago conference. Besides the earlier mentioned Transit Agreement, the International Air Transport Agreement ('Five freedoms' Agreement) has also been adopted and it granted the first five freedoms on a multilateral basis.[19] Read together, these two agreements could have been the basis of a multilateral regime. However, given that only 12 countries signed the 'Five freedoms' Agreement in over 50 years,[20] only the Transit agreement attained the required number of signatories to enter into force, thus obliging states to separately negotiate agreements to gain additional traffic rights.[21]

Over the past few decades, multilateral agreements have been considered marginal in their importance. In recent years, however, the possibility increased for the net consisting of 3500-4000 bilateral ASAs to be transformed, over time, into a few separate multilateral agreements. Perhaps the most important initiative outside the EU has been the Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT).[22] Besides, there are other regional liberalisation processes in Asia,[23] the Pacific[24] and South America.[25]

4.2 Deregulation in the US

During the first part of the 20th century, the US Congress enacted a number of

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19 International Air Transport Agreement, available at: <www.mcgill.ca/iasl/sites/mcgill.ca.iasl/files/chicago1944c.pdf> accessed 31 December 2012.

20 Cheng-Jui Lu 2002 (n 5) 13.

21 SD Rynerson, 'Everybody wants to go to heaven, but nobody wants to die: the story of the transatlantic common aviation area' (2002) Summer/Fall Denver Journal of International Law and Policy 424.

22 Current members are Brunei Darussalam, Chile, New Zealand, Singapore and the USA. See <www.maliat.govt.nz> accessed 31 December 2012.

23 For further details, see P Forsyth, J King and CL Rodolfo, 'Open Skies in ASEAN' (2006) 12 Journal of Air Transport Management 143. See also the Agreement among Director General of Civil Aviation of Cambodia, Laos, Myanmar and Vietnam on the Establishment of Sub-regional Air Transport Cooperation, overview summary available at: <http://legacy.icao.int/icao/en/atb/ecp/CaseStudies/CLMV_Cooperation_En.pdf> accessed 31 December 2012.

24 See the Pacific Islands Air Services Agreement available at: <http://www.forumsec.org/resources/uploads/attachments/documents/PIASA%20text%2010%20signatures.pdf> accessed 31 December 2012.

25 Andean Open Skies Pact, available at: <http://www.comunidadandina.org/ingles/normativa/d297e.htm> accessed 31 December 2012.

statutes that subjected major industries to substantial governmental regulation.[26] Economic regulation was first established in the railroad industry before extending to motor carriers, airlines, telephony, banking and electricity between 1880-1930,[27] building largely upon the statutory regime first enacted in 1887.[28]

4.2.1 The years of regulation

In 1938, the Civil Aeronautics Act[29] was adopted which established the Civil Aeronautics Board (CAB), the main regulatory agency from 1938-1978 in this field. The Act afforded the CAB the authority to control mergers, agreements, entry and exit, to regulate fares, to award direct subsidies, to give antitrust immunity and to investigate unfair trade practices.[30] The aim of this regulation was to promote adequate, economical, and efficient service by air carriers at reasonable rates.[31]

During the early years of regulation, CAB classified airlines as trunk, local, commuter, supplemental and intrastate airlines. The distinction among these airlines was the following:[32] Trunk airlines were allowed to develop national networks and they had no restrictions as regards to the markets or the size of their aircraft. Local carriers had restrictions imposed on the markets they could serve, while commuter airlines had limitations placed on the aircraft they could use. Supplemental airlines had no right to operate scheduled services. Finally, intrastate airlines were free to operate within their home state.[33] In this environment, airlines competed on capacity and frequency and, although this probably increased welfare, it was more than offset by the negative impacts of higher prices.[34] Market entry was restricted and between

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26 Statement of JI Klein, Assistant Attorney General, Antitrust Division before the Committee on Commerce, Science, and Transportation, U.S. Senate concerning antitrust issues in the airline industry (July 27, 2000). See for example Merchant Marine Act of 1916 39 Stat. 728, 46; Motor Carrier Act of 1935, P.L. 74-255, 49 Stat. 543; Communications Act of 1934, P.L. 416, 48 Stat. 1064; Natural Gas Act of 1938, P.L. 75-688, 52 Stat. 821; Civil Aeronautics Act of 1938, P.L. 706, 52 Stat. 973.

27 AR Goetz, 'Deregulation, competition, and antitrust implications in the US airline industry' (2002) 10 Journal of Transport Geography 1 (Goetz 2002) 2.

28 See Interstate Commerce Act of 1887, 24 Stat. 379 enacted February 4, 1887.

29 P.L. 706, 52 Stat. 973.

30 EE Bailey, DR Graham and DP Kaplan, *Deregulating the airlines* (MIT Press 1985) (Bailey 1985) 11.

31 ibid.

32 Based on Bailey 1985 (n 30) 15.

33 The most developed intrastate markets were that of California and Texas due to their size.

34 R Fischer, *Time sensitivity of passengers and market structure in the airline industry, a model of international air transport* (Dissertation zur Erlangung der Würde eines Doktors der Wirtschafts- und Sozialwissenschaften) (Peter Lang Verlag 1997) (Fischer 1997) 39.

1938 and 1977 the CAB did not permit any entry into city pair markets that already had two or more carriers.[35] Even expansion of incumbent airlines was strictly regulated. Airlines wishing to expand were required to show that their expansion would not harm the other airline on the route.[36] Air fares were also controlled and the fare structure was rigid, imposing uniform rates and refusing permission to make individual price increases or deductions.[37] The fare structure became increasingly distorted in its relationship to cost structures; fares were substantially above efficient levels.[38]

4.2.2 Deregulation and its effects on the industry

Over the years, regulation, both in general[39] and in relation to air transport, has garnered much criticism among academics.[40] Advocates of deregulation have tended to base their arguments on three key theoretical pillars: in the airline industry (i) economies of scale are non-existent, (ii) barriers to entry are low, and (iii) the markets are contestable.[41] Barriers to entry, exit and market contestability are closely related. It was argued that, in transport markets, barriers to entry and exit are non-existent or, they are extremely low due to the absence of large sunk costs. An undertaking can simply lease an aircraft and fly it wherever it wants without any difficulties. As aircrafts have developed a second hand market, exit would also be unproblematic. It was argued that this enables hit and run competition, which leads us on to contestable markets theory. Despite having only been fully developed in the

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35 P Hanlon, *Global airlines, competition in a transnational industry* (3rd edn Butterworth Heinemann 2007) (Hanlon 2007) 71.

36 S Borenstein and NL Rose, 'How airline markets work...or do they? Regulatory reform in the airline industry' in NL Rose (ed), *Economic regulation and its reform: what we have learned* (forthcoming from University of Chicago Press) (Borenstein and Rose 2008) 6, available at: <www.nber.org/chapters/c12570.pdf> accessed 31 December 2012.

37 Cheng-Jui Lu 2002 (n 5) 23.

38 Borenstein and Rose 2008 (n 36) 7.

39 See eg WJ Baumol and AK Klevorick, 'Input Choices and Rate-of-Return Regulation: An Overview of the Discussion' (1970) 1 The Bell Journal of Economics and Management Science 162; GJ Stigler, 'The Theory of Economic Regulation' (1971) 2 The Bell Journal of Economics and Management Science 3; RA Posner, 'Theories of Economic Regulation' (1974) 5 The Bell Journal of Economics and Management Science 335.

40 See eg RE Caves, *Air transport* and *its regulators*: *an industry study* (Harvard University Press 1962); GW Douglas and JC Miller III, *Economic regulation of domestic air transport; theory and policy* (Brooking Institution 1974); WA Jordan, *Airline regulation in America; effects and imperfections* (Johns Hopkins Press 1970).

41 Goetz 2002 (n 27) 3; For a good overview see also ME Levine, 'Airline competition in deregulated markets: theory, firm strategy and public policy' (1987) 4 Yale Journal on Regulation 393.

early 1980s,[42] Alfred Kahn - the chairman of CAB and the 'father of airline deregulation' - referred to it at the times of deregulation. He suggested that 'the realistic threat of entry by new and existing carriers on the initiation of management alone is the essential element of competition'.[43]

In other words, even the threat of entry and potential competition can compel market participants to charge competitive prices and to produce the equivalent of perfect competition output. Under these circumstances, market structure loses its relevance and, as such, even a monopoly would be unproblematic. Preconditions for contestability are:[44] completely free entry and no exit costs; the entrant has no cost disadvantage compared to the incumbent; no sunk costs; and the entrants can hit the market with lower prices before the incumbent can respond with any price adjustment. Besides the theoretic approach, the Californian and Texan market provided empirical evidence.[45] Intrastate carriers offered lower prices and still incurred higher profits.[46]

On 24 October 1978, the Airline Deregulation Act[47] (ADA) was adopted, the regulatory powers of the CAB have been gradually relaxed and, as of 1 January 1983, all its authority concerning domestic fares expired. From 1 January 1985, CAB ceased to exist and, with the Sunset Act,[48] its remaining powers were transferred to the Department of Transportation. With the ADA, entry and exit on the domestic market became free and carriers gained full control over prices.

It is difficult to evaluate the precise effects of deregulation. The US economy was in serious recession following the years of the ADA; there was a substantial rise in fuel prices and further advances in aircraft technology in the 1970s reduced operating costs. As a consequence of the deregulation, 270 million more passengers enplane every year and 350 billion more revenue passenger miles (RPMs) are generated per

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42 WJ Baumol, JC Panzar and RD Willig, *Contestable markets and the theory of industry structure* (Harcourt Brace Jovanovich Publishers 1982).

43 Goetz 2002 (n 27) 4.

44 RJ Van den Bergh and PD Camesasca, *European Competition Law and Economics* (2nd edn Sweet & Maxwell 2006) 91.

45 See eg AS De Vany, 'The effect of price and entry regulation on airline output, capacity and efficiency' (1975) 6 Bell Journal of Economics 327; or TE Keeler, 'Airline Regulation and Market Performance' (1972) 3 The Bell Journal of Economics and Management Science 399.

46 Fischer 1997 (n 34) 39.

47 P.L. 95-504, 92 Stat. 1705.

48 P.L. 98-443, 98 Stat. 1704.

annum, while US communities have over three million more departures every year.[49] Morrison and Winston[50] estimated the welfare gains of deregulation at at least a USD six billion annual improvement for travellers, and a USD 2.5 billion annual increase in industry profits.

It was only after 1981 that new entry became large scale and, by September 1983, 22 new interstate carriers emerged. They offered lower fares, albeit to varying degrees.[51] In real terms, tariffs fell while the use and variety of discount fares rose significantly.[52] Studies have shown that prices fell by 30%, even if the continuation of improved regulation is taken into account.[53] Industry concentration and costs fell, while profits rose. Airlines began to rapidly restructure their route networks. They placed emphasis on connecting services using a particular airport (the hub) as a transfer point.

The earlier mentioned theoretic foundations of deregulation proved to be invalid and inapplicable to air transport.[54] It became evident that airlines operating hub-and-spoke networks realise significant economies of scope and traffic density, which were reinforced by computerised reservation systems (CRS), frequent flyer programmes (FFP) and other loyalty schemes. In addition, despite earlier thoughts to the contrary, economies of scale also concern advertising and marketing expenditures that play an important role in the deregulated market. Advertising costs are sunk costs; they cannot be recouped when exiting the market. Airport congestion, FFPs and the capital intensiveness of CRSs manifested themselves as entry barriers. Finally, incumbent operators are capable of reacting instantly to the actions of new entrants by using sophisticated revenue management systems.

All in all, in the midst of the straightjacket of regulation, deregulation facilitated a dynamic marketplace where consumers gained enormously from lower fares.[55] For

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49 Cheng-Jui Lu 2002 (n 5) 25.

50 S Morrison and C Winston, *The economic effects of airline deregulation* (The Brookings Institution 1986) 1-2.

51 K Button and R Stough, *Air transport networks* (Edward Elgar Publishing 2000) (Button 2000) 95.

52 ibid.

53 See S Morrison and C Winston, *The evolution of the airline industry* (The Brooking Institution 1995); Borenstein and Rose 2008 (n 36) 14.

54 Goetz 2002 (n 27) 5.

55 EE Bailey, 'Air transportation deregulation' 10, available at: <www.aeaweb.org/annual_mtg_papers/2008/2008_264.pdf> accessed 31 December 2012.

airlines, deregulation has been a costly experience; although, a few have prospered in the new environment.[56] Moreover no new equilibrium has yet been found, many innovative and new solutions have appeared.

4.2.3 More liberal bilaterals as an effect of deregulation

In 1978, the US turned its attention to renegotiating ASAs; partly as a result and a logical extension of deregulation, and partly as an element of the same initiative of which deregulation formed part. Following the 1978 statement on 'International Air Transport Negotiations'[57] and the 1979 International Air Transportation Competition Act,[58] a significant liberalisation of existing ASAs entailed. Of course, these international changes were well within the interest of US carriers. A logical extension of internal network development was for the carriers to draw international traffic to their respective hubs.[59]

It was the like-minded Netherlands, in 1978, who signed the first modified 'open market' ASA with the US.[60] The agreement contained multiple designation, extensive fifth freedom rights, more extensive market access, free capacity and frequency determination even on sixth freedom services, double disapproval and country of origin rules on price control.[61] By the early 1990s, a further phase of liberalisation began with the conclusion of the 'open skies' agreements. In 1992, the first open skies agreement was concluded between the US and again the Netherlands. An open skies agreement contains no limitations on route access, pricing or other market parameters but, nevertheless, they still prohibit cabotage and apply the substantial ownership and effective control rules, thereby limiting opportunities to the contracting countries' carriers.

4.3 Liberalisation in the EU

US deregulation served as a direct impetus for liberalisation in the EU. There were,

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56 Borenstein and Rose 2008 (n 36) 57.

57 Jimmy Carter, 'International Air Transportation Negotiations Statement of U.S. Policy for the Conduct of the Negotiations.' August 21, 1978. Online by G Peters and JT Woolley, *The American Presidency Project,* available at: <http://www.presidency.ucsb.edu/ws/?pid=31218> accessed 31 December 2012.

58 P.L. 96-192, 94 Stat. 35.

59 Button 2000 (n 51) 114.

60 Doganis 2010 (n 2) 45.

61 ibid.

however, some important differences between the two regions. The European market is composed of Member States with different languages, cultures and economies. At the time of liberalisation, each Member State had its own flag carrier with their vested interests, and these were mainly in state ownership. Most flights are international with very high cost levels.[62] In geographic terms, the European market is smaller and the population density is much higher. In addition to this, the US population and business centres are spread much more widely and, therefore, average journey length is significantly longer than in Europe (1 200km compared with 900km).[63] In Europe, all the travel generating centres are in fairly close distance among the 'hot banana', reaching from southeast England to northern Italy.[64] Moreover, given the strong and ever-developing road and railroad infrastructure, alternative travel modes often constitute close substitutes to air transport on shorter distances. The hub-and-spoke system on intra-European level has less potential because direct flights are favoured.

4.3.1 Road to liberalisation in Europe

Facilitating liberalisation within the EU was by no means an easy task, especially given the final decision lay in the hands of Member States in the Council. They were reluctant to change the traditional bilateral system for decades. Liberalisation in the EU was driven by two parallel initiatives of the Commission, which mutually reinforced one another. The Directorate General for Transport had made several attempts to push through liberalisation measures in the Council since the mid-1970s, while the Competition Directorate forced the application of competition rules in the air transport sector.

The original framework of air transport in Europe was based on bilateral ASAs of the Chicago system. This situation and the special strategic, economic and national interests connected with aviation resulted in the ambiguous, not too far reaching provisions in the EC Treaty. In contrast to all other sectors, there was no basis for a

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62 P Nijkamp, 'Liberalisation of Air Transport in Europe: The Survival of the Fittest?' Research memorandum 1996-1 (1996), available at: <ftp://zappa.ubvu.vu.nl/19960011.pdf> accessed 31 December 2012.

63 Hanlon 2007 (n 35) 144.

64 ibid.

common transport policy.[65] Article 80(2) of the EC Treaty established that 'the Council may, acting by a qualified majority, decide whether, to what extent and by what procedure appropriate provisions may be laid down, for sea and air transport'.[66] Member States tried to interpret this obscure drafting as excluding air transport from the ambit of the entire Treaty (minimalist approach).[67] On the other hand, the Commission argued that the general provisions - including those on competition - apply (maximalist approach).[68] The final word was given by the Court of Justice of the European Union (Court of Justice) in several judgments over the course of a number of years, which approved the Commission's approach.[69]

Since 1979, the Commission has put forward several documents and legislative proposals in support of air transport liberalisation and the application of competition rules to the sector.[70] The first partial success of this took the form of the experimental directive of the Council on regional air services;[71] although, its significance was certainly limited.[72] The Commission's position was further strengthened in 1985 when the Court of Justice found that the Council was in breach of its obligations when it failed to establish a common transport policy.[73] In 1985, a precise timetable was set up for the completion of the internal market, including air transport with a deadline of 1992, while the Single European Act represented a

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65 B Adkins, *Air Transport and E.C. Competition Law* (Sweet & Maxwell 1994) (Adkins 1994) 2.

66 Now Article 100(2) TFEU with a modified text.

67 H-C Rosien, *Die Anwendung der Wettbewerbsregeln des EWG-Vertrages auf den Luftlinienverkehr der Europäischen Gemeinschaft* (Dissertation zur Erlangung des Doktorgrades des juristischen Fachbereichs der Georg-August-Universität zu Göttingen) (1993) 40.

68 ibid 42.

69 See joined cases 209 to 213/84 *Ministère Public v Lucas Asjes, Andrew Gray, Jacques Maillot, Leo Ludwig and others* [1986] ECR 1425; Case 66/86 *Ahmed Saeed Flugreisen* [1989] ECR 803; and also case 167/73 *Commission v French Republic* [1974] ECR 359; Case 156/77 *Commission v Belgium* [1978] ECR 1881.

70 The Commission's 'first memorandum' on liberalisation: Contribution of the European Communities to the development of Air Transport Services COM 311 Bulletin of the European Community, Supplement 5/79; Proposal for a Council Regulation (EEC) applying Articles 85 and 86 of the Treaty to air transport, COM (81) final [1981] OJ C291/4, as amended by [1982] C317/3; Progress towards the development of a Community air transport policy. Civil aviation memorandum No. 2. Communication and proposals by the Commission to the Council, COM (84) 72 final (second memorandum).

71 Council Directive (EEC) 83/416 of 25 July 1983 concerning the authorization of scheduled inter-regional air services for the transport of passengers, mail and cargo between Member States [1983] OJ L237/19.

72 J Balfour, 'Air transport – a Community success story?' (1994) 31 Common Market Law Review 1027.

73 Case 13/83, *European Parliament v Council* [1985] ECR 1513.

political commitment to this deadline.[74]

In 1986, the Commission sent letters to ten Member States' airlines alleging that they were in breach of the competition rules.[75] In this regard, it used the competition rules to achieve results on the regulatory side.[76] Member States were finally convinced and compelled to act in the Council and on 17 December 1987 the 'first package' of liberalising and implementing measures was adopted. It comprised the implementing regulation for air transport,[77] an authorising regulation enabling the Commission to adopt block exemptions;[78] a directive on fares;[79] and a decision on capacity and route access.[80] The following year, the Commission adopted three block exemptions.[81] The first package enabled the application of competition rules on intra-EU routes in the same way as in other industries.[82] It also standardised and relaxed different fare-determining and fare-approval systems and, furthermore, eased restrictions, introduced more flexibility and strengthened convergence among the

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74 P Craig and G de Búrca, *EU Law, text, cases and materials* (5th edn OUP 2011) 583.

75 Aer Lingus, Alitalia, Air France, British Airways, British Caledonian, KLM, Lufthansa, Olympic Airways, Sabena and SAS.

76 See in particular press release IP/86/303 3.

77 Council Regulation (EEC) 3975/87 of 14 December 1987 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector [1987] OJ L374/1.

78 Council Regulation (EEC) 3976/87 of 14 December 1987 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector [1987] OJ L374/9.

79 Council Directive (EEC) 87/601 of 14 December 1987 on fares for scheduled air services between Member States [1987] OJ L374/12.

80 Council Decision (EEC) 87/602 of 14 December 1987 on the sharing of passenger capacity between air carriers on scheduled air services between Member States and on access for air carriers to scheduled air-service routes between Member States [1987] OJ L374/19.

81 Commission Regulation (EEC) 2671/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings, decisions of associations of undertakings and concerted practices concerning joint planning and coordination of capacity, sharing of revenue and consultations on tariffs on scheduled air services and slot allocation at airports [1988] OJ L239/9;
Commission Regulation (EEC) 2672/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings relating to computer reservation systems for air transport services [1988] OJ L239/13;
Commission Regulation (EEC) 2673/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings, decisions of associations of undertakings and concerned practices concerning ground handling services [1988] OJ L239/17.

82 Initially the Commission's regular enforcement powers applied only to intra-EU international routes and later to all intra-EU. The full applicability was only achieved in 2004 (see Council Regulation (EC) 411/2004 of 26 February 2004 repealing Regulation (EEC) 3975/87 and amending Regulations (EEC) 3976/87 and (EC) 1/2003, in connection with air transport between the Community and third countries [2004] OJ L68/1). Prior to 2004, the Commission was able to investigate agreements relating to third country routes only with the aid of the transitional rules contained in Articles 104 and 105 TFEU.

ASAs of Member States with other Member States. Consequently, this reform built on the existing Chicago system. More liberal ASAs were allowed to remain in force or to conclude.

In 1990, following the review of the first package, the Council adopted the 'second package'. This included new regulations on fares,[83] on route access and capacity,[84] while a modification[85] allowed the adoption of new block exemptions.[86] In 1991, a new regulation for cargo services[87] was adopted and the Commission attained the authority to adopt interim measures in its proceedings.[88] The new legislation further relaxed the rules and increased flexibility.

4.3.2 The third package and the present regulatory system of the EU

Compared to the first two packages, the third package was truly revolutionary. The first and second packages built on the traditional bilateral system and tried to relax ASAs between Member States in a harmonised way, in an attempt to facilitate something between the 'open market' and 'open skies' agreements. Upon introduction of the third package, Member States switched from a system of liberal bilateral ASAs to an almost entirely open multilateral system. The aim was to keep state intervention to a minimum and to provide airlines with the freedom to decide independently on key parameters of competition. This framework rested on three

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83 Council Regulation (EEC) 2342/90 of 24 July 1990 on fares for scheduled air services [1990] OJ L217/1.

84 Council Regulation (EEC) 2343/90 of 24 July 1990 on access for air carriers to scheduled intra-Community air service routes and on the sharing of passenger capacity between air carriers on scheduled air services between Member States [1990] OJ L217/8.

85 Council Regulation (EEC) 2344/90 of 24 July 1990 on the application of Article 85 (3) of the treaty to certain categories of agreements and concerted practices in the air transport sector [1990] OJ L217/15.

86 Commission Regulation (EEC) 82/91 of 5 December 1990 on the application of Article 85 (3) of the Treaty to certain categories of agreements, decisions and concerted practices concerning ground handling services [1991] OJ L10/7.
Commission Regulation (EEC) 83/91 of 5 December 1990 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings relating to computer reservation systems for air transport services [1991] OJ L10/9.
Commission Regulation (EEC) 84/91 of 5 December 1990 on the application of Article 85 (3) of the Treaty to certain categories of agreements, decisions and concerted practices concerning joint planning and coordination of capacity, consultations on passenger and cargo tariffs rates on scheduled air services and slot allocation at airports [1991] OJ L10/14.

87 Council Regulation (EEC) 294/91 of 4 February 1991 on the operation of air cargo services between Member States [1991] OJ L36/1.

88 Council Regulation (EEC) 1284/91 of 14 May 1991 amending Regulation (EEC) 3975/87 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector [1991] OJ L122/2.

pillars: Regulation 2407/92 on licensing,[89] Regulation 2408/92 on market access,[90] and Regulation 2409/92 on fares[91] which created a system of common licensing rules requiring substantial ownership and effective control of EU nationals; as well as providing a full exchange of traffic rights and practically free pricing.

In 2008, the Parliament and the Council adopted the new regulatory framework of air transport, consolidating the three regulations of the third package into one. Regulation 1008/2008 simplified and updated the text to regulate the licensing of EU air carriers, the right of EU air carriers to operate intra-EU air services and the pricing of intra-EU air services.[92]

4.3.2.1 Licensing

An undertaking established within the EU can only carry air passengers, mail or cargo if it has been granted an appropriate operating licence.[93] The regulation sets uniform conditions for the granting of operating licences in the EU by any of the competent authorities within a Member States.[94] Undertakings must in particular hold an Air Operator Certificate (AOC), comply with insurance and ownership requirements and provide financial guarantees. In addition, management will be requested to provide proof that the undertaking is of good reputation.[95] An operating licence shall be valid as long as the air carrier complies with the requirements defined by the Regulation.[96] The new licensing rules still apply traditional ownership rules,[97] ie the requirement to maintain the substantial ownership and effective control of EU nationals.[98]

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89 Council Regulation (EEC) 2407/92 of 23 July 1992 on licensing of air carriers [1992] OJ L240/1.

90 Council Regulation (EEC) 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes [1992] OJ L240/8.

91 Council Regulation (EEC) 2409/92 of 23 July 1992 on fares and rates for air services [1992] OJ L240/15.

92 Parliament and Council Regulation (EC) 1008/2008 of 24 September 2008 on common rules for the operation of air services in the Community [2008] OJ L293/3 (Regulation 1008/2008).

93 ibid Article 3(1).

94 ibid Article 4.

95 ibid Article 7.

96 ibid Article 8(1).

97 See Article 4(f).

98 See for example *Swissair/Sabena* Commission Decision 95/404/EC [1995] OJ L239/19, in particular section IX.

4.3.2.2 Market access

EU air carriers are authorised to operate freely between any airport pair within the EU based on their individual business decisions and, furthermore, Member States cannot subject their operation to any permit or authorisation.[99] The European market operates as an open aviation area with a single set of rules for EU airlines. As with the earlier regulations on market access, Regulation 1008/2008 also provides the potential for public service obligations between an airport and a peripheral or development region in the EU or on a thin route to an airport in its territory.[100] The grant of traffic rights is automatic, except in cases specified by the Regulation itself.[101] The Commission has clarified, in its *Viva Air* decision, that the right to exercise traffic rights does not extend to slot allocation.[102] The availability of slots may not be criteria for the granting or refusal of authorisation.[103]

4.3.2.3 Fares

EU air carriers and, on the basis of reciprocity, air carriers of third countries shall freely set fares for passengers and cargo for intra-EU air services, except in the case of a public service obligation.[104] Member State authorities have no opportunity to intervene in airline pricing, including the earlier restrictions on pricing with respect to third country routes arising from bilateral agreements between Member States (eg sixth freedom price leadership).[105]

4.3.2.4 Slot allocation

A scarcity of slots constitutes one of the most significant barriers to entry in air transport markets. Capacity building or even the expansion of airports is a lengthy process, complicated by environmental issues. Furthermore, with the adoption of a hub-and-spoke route system, traffic is concentrated within particular airports. Naturally, new entrants have initially sought to enter dense routes, while incumbents have also increased frequency on those. All this has increased congestion at key

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99 Regulation 1008/2008 Articles 15(1) and (2).
100 ibid Articles 16-18.
101 ibid Articles 19-20.
102 *Viva Air* (Case VII/AMA/I/93) Commission Decision 93/347/EEC [1993] OJ L140/51.
103 Adkins 1994 (n 65) 226.
104 Regulation 1008/2008 Article 22(1).
105 ibid recital 10 and Article 22(2).

European airports. Slot allocation at EU airports was organised according to the IATA rules, which are based on the principle of 'grandfathering'.[106] In essence, it means that an airline, which operates a particular slot in one season, acquires the right to operate it in the following season.[107] In practice, airlines behave as the owner of a slot. Realising that the benefits of liberalisation could unevenly spread, and that competition was becoming distorted due to the lack of available slots, the Council adopted in 1993 a regulation on the EU rules of slot allocation.[108]

According to the recitals of the Regulation, slot allocation should be based on neutral, transparent and non-discriminatory rules. The Regulation applies to EU airports[109] and establishes provisions for coordinated and fully coordinated airports. Article 8 essentially confirms the principle of grandfathering. Newly created, unused slots[110] and vacated slots are to be placed in a slot pool. 50% of the slots in the pool shall be distributed to the applicant carriers and the other 50% to new entrants. The Regulation applies to both EU and third country carriers but, in the case of the latter, the application of the Regulation can be suspended based on reciprocity.

In light of the increasingly problematic state of airport congestion in Europe, the Commission responded in 2011 by submitting a proposal for the review of the slot Regulation.[111] The new Regulation would expressly allow slot transactions and improve the efficiency of new entrant rules. Its purpose would be to improve the use of airport capacity and improve the allocation process, thereby supporting market entry.

4.3.2.5 Computerised reservation systems

CRSs were first developed in the 1960s and 1970s and served simply as a device for saving time and labour while handling a large and growing amount of flight reservation data.[112] CRSs can pose several problems for airline competition. Most

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106 IATA Worldwide Slot Guidelines, the current version is available at: <http://www.iata.org/policy/slots/Pages/slot-guidelines.aspx> accessed 31 December 2012.

107 Adkins 1994 (n 65) 236.

108 Council Regulation (EEC) 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports [1993] OJ L14/1.

109 ibid Article 1.

110 Operated less than 80% during the allocation time, ibid Article 10.

111 Proposal for a Regulation of the European Parliament and of the Council on common rules for the allocation of slots at European Union airports COM (2011) 827 final.

112 Hanlon 2007 (n 35) 107.

importantly, although the spread of internet sales in air transport is increasing, a significant number of bookings are still made through CRS at travel agents.[113] As flights tend to be booked from the first screen page of a CRSs' visual display unit, owner airlines can easily manipulate what is displayed on these screens in order to bias the thought processes of customers in favour of their own services, rendering market entry more difficult. In recent years, however, most airlines have disposed of their shareholdings in CRS.[114]

CRS operation is characterised by large economies of scale. Average cost is continuously falling as the creation of the system requires large fixed costs while the marginal cost of handling additional bookings and flights is close to zero.[115] These circumstances presented good reasons for some kind of general regulatory measure regardless any potential case-by-case application of Articles 101 and 102 TFEU. The Council chose to establish a code of conduct in the form of a Regulation.[116] As a result of this, CRSs should be used in a non-discriminatory and transparent way,[117] subject to certain safeguards[118] thereby protecting the interest of consumers.

4.3.2.6 Ground handling

Another important area for the success of air transport liberalisation is the ground handling market. These are essential for the optimal functioning of air transport; opening up these markets should help to reduce the operating costs of airlines.[119] Ground handling agreements were subject to block exemptions in the first two packages but this proved to be an inefficient treatment of the problem and, therefore, the Council adopted a Directive in 1996.[120] The Directive aims to ensure that at least one, from the airport's dominant air carrier and from the managing authority

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113 This is especially true for business passengers, the most important customers of an airline.

114 Currently, Amadeus is the only CRS where airlines have a shareholding. However, Lufthansa, Iberia and Air France have only a minority share in the undertaking and recently decreased futher their respective shareholdings. See in Airline Weekly issue no. 407 (19 November 2012) 5.

115 Hanlon 2007 (n 35) 108.

116 Parliament and Council Regulation (EC) 80/2009 of 14 January 2009 on a Code of Conduct for computerised reservation systems and repealing Council Regulation (EEC) 2299/89 [2009] OJ L35/47.

117 ibid Article 3(1).

118 See eg ibid Articles 5 and 10.

119 ibid recital 5.

120 Council Directive (EC) 96/67 of 15 October 1996 on access to the groundhandling market at Community airports [1996] OJ L272/36.

independent ground handling operator, can enter the market and that self-handling is made possible for all airlines.

4.3.2.7 Airport charges

Also, as a part of the initiative concerning airports, the European Parliament and the Council adopted a Directive on airport charges.[121] The Directive sets out common principles for levying airport charges at EU airports with more than 5 million passengers annually. Total transparency, airport user-consultation and non-discrimination are the main elements of calculating charges.[122]

4.3.3 External aviation policy of the EU

From an early stage, it became apparent that a multilateral liberalisation initiative, like the one adopted in the EU, could not realise all of its potential benefits unless also complemented by a common policy towards third countries. In this respect, we can identify another significant difference in comparison to the US. Airlines of the US were able to take advantage of their new liberalised home market when they expanded their network internationally. All market participants were treated as US airlines satisfying the substantial ownership and effective control requirement. When it came to consolidation, they were able to take control of competitors' networks and hubs.

In contrast, although EU airlines enjoyed the benefits of the internal market, in the absence of a common external aviation policy with respect to third countries they remained restricted to eg French, or UK airlines. As a consequence, European airlines were not able to fly third country destinations from airports outside their respective home countries, unless this was permitted by the bilateral ASAs of all the countries involved.[123] A merger between national airlines would risk the loss of the whole traffic right portfolio of the acquired airline. From outside the EU, the European market still appeared very much fragmented among its national borders. A common external aviation policy would clearly be of interest to the EU since, when

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121 Parliament and Council Directive 2009/12/EC of 11 March 2009 on airport charges [2009] OJ L70/11.

122 ibid Articles 3, 6 and 7.

123 eg in 1991, the UK secured seventh freedom rights for its airlines to fly directly from Belgium, Germany or the Netherlands to the US.

it comes to negotiations, the EU can offer a market of 27 Member States, a population of ca. 500 million and numerous commercially attractive destinations.

Still there are good reasons for the failure to create one. Member States appeared reluctant to transfer negotiation rights, because they felt as though the Commission was understaffed and inexperienced in bilateral aviation matters.[124] Another reason for the resistance could be protectionism and defence of the own national airline's interests. The fact that, at an EU level, Member States can achieve more with partners jointly does not mean that they cannot achieve more individually than other Member States. They are in direct competition with each other in their struggle to create better access to markets for their airlines.[125] Member States were induced to deal individually. The aviation relationships with the US provided the clearest example of this.

The US realised this opportunity and applied the *'divide et impera'* tactics in its dealings with Member States. They could easily lure particular Member States to open up their markets individually. Moreover, as a consequence, neighbouring Member States also had the extra incentive to avoid traffic diversion and, therefore, followed suit.[126] As a result, European airlines could only fly from their respective home countries, without any cabotage rights within the deregulated US market. On the other hand, US airlines had open skies access from any point in the US to many European destinations and, through fifth freedom rights, they had an almost unlimited possibility to fly within the liberalised European market ('quasi cabotage').[127] In order to remedy this situation, the Commission long sought the power to negotiate with third countries.

4.3.3.1 The road leading to the *Open Skies* judgments

From a very early stage, relationships with third countries have proved a

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124 C Woll 'The road to external representation: the European Commission's activism in international air transport' (2006) 13 Journal of European Public Policy 52, 59.

125 Air transport relations with third countries. Communication from the Commission to the Council COM (92) 434 final (1992 Communication) para 19.

126 See speech by Neil Kinnock to the Association of European Airlines – Luxembourg, 28 April 1995, SPEECH/95/82.

127 To offer an example: US airlines cannot, of course, fly cabotage within a Member State (eg New York-Franfurt-München). However, using fifth freedom rights, they can operate between two intra-EU points (eg New York-Frankfurt-Helsinki).

troublesome issue for the Commission.[128] The Commission's initial proposal[129] for an exclusive competence was met with strong opposition from Member States. It had insisted on exclusive competence for concluding bilateral ASAs,[130] maintaining that some Member States infringed this competence.[131] The Council blocked these initiatives and rejected the Commission's argumentation, maintaining that Member States have full control over international aviation negotiations, with the exception of joint dealing which the Commission was granted a mandate on.[132]

Once again, the Commission pursued a strategy resembling the one used for internal liberalisation. On the one hand, the Commission made repeated proposals to the Council concerning external negotiations. On the other hand, it tried to use various Treaty provisions to substantiate its competence in these matters and 'threatened' Member States with infringement procedures. Since its threats proved ineffective,[133] the Commission sent letters of formal notice informing the Member States concerned that their open skies agreements with the US constituted an infringement of EU law. On 17 June 1996, the Council decided to grant authorisation for the Commission to open negotiations with the US in the field of air transport. The purpose of these negotiations was to establish a Common Aviation Area with the US but, nevertheless, the Commission had a limited mandate.[134] Since Member States continued to negotiate ASAs with the US, the Commission decided to re-open the infringement procedures and, in November 1998, the Commission referred eight Member States to the Court of Justice within the ambit of an Article 258 TFEU procedure.[135] The Commission did, however, achieve some success as regards certain neighbouring countries.[136]

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128 See para 90 second memorandum (n 70).

129 Proposal for a Council Decision on a consultation and authorization procedure for agreements concerning commercial aviation relations between Member States and third countries COM (90) 17 final.

130 1992 Communication para 50.

131 ibid para 52.

132 Council conclusions of 15 March 1993 Press release 5333/93.

133 See: Commission explains the background to its position on air transport policy with the United States – MEMO/95/24, 02/03/1995.

134 1937th meeting of the Council press release 8079/96, 17/06/1996.

135 IP/98/966, 05/11/1998. These were the open skies cases.

136 See the *Agreement between the European Economic Community, the Kingdom of Norway and the Kingdom of Sweden on civil aviation* [1992] OJ L200/21 - approved by Council Decision 92/384/EEC of 22 June 1992 [1992] OJ L200/20; *Agreement on the European Economic Area* [1994] OJ L1/3 – approved by Council and Commission Decision 94/1/EC, ECSC of 13 December 1993 [1994] OJ L1/1; *Agreement between the European Community and the Swiss*

4.3.3.2 The *Open Skies* judgments

On 5 November 2002, the Court of Justice made its judgments in the *Open Skies* cases.[137] The Commission claimed that the seven Member States that entered into open skies agreements were in breach of the principles governing the division of external competences between the EU and the Member States. In alternative they infringed either [Article 351(2) TFEU] or [Article 4(3) TEU] with their failure to do everything possible to render these agreements fully compliant with EU law. Furthermore, the Commission accused all eight Member States of infringing [Article 49 TFEU] because substantial ownership and effective control clauses discriminated according to nationality concerning the establishment of airlines.

Concerning external EU competence in aviation matters, the Court of Justice established that the Member States had infringed the EU's exclusive competence in a limited and rather insignificant area.[138] Any agreement negotiated in this area on a national level is contrary to EU law.

Concerning the right of establishment, the Court of Justice provided that Member States who are party to an agreement with a third country should grant, to the permanent establishments of companies resident in another Member State, the advantages provided for by that agreement on the same conditions as those which apply to companies resident in the Member State concerned.[139] Substantial ownership and effective control clauses within ASAs are an obvious case for discrimination without any justification. Such discrimination deprives EU airlines from benefiting from the right of establishment and taking advantage of the ASA

Confederation on Air Transport [2002] OJ L114/73 – approved by Council and Commission Decision 2002/309/EC, Euratom of 4 April 2002 [2002] OJ L114/1.

137 Case C-476/98 *Commission v Republic of Germany* [2002] ECR I-9855; Case C-475/98 *Commission v Republic of Austria* [2002] ECR I-9797 (*Open Skies Austria* case); Case C-472/98 *Commission v Grand Duchy of Luxembourg* [2002] ECR I-9741; Case C-471/98 *Commission v Kingdom of Belgium* [2002] ECR I-9681; Case C-469/98 *Commission v Republic of Finland* [2002] ECR I-9627; Case C-468/98 *Commission v Kingdom of Sweden* [2002] ECR I-9575; Case C-467/98 *Commission v Kingdom of Denmark* [2002] ECR I-9519; Case C-466/98 *Commission v United Kingdom of Great Britain and Northern Ireland* [2002] ECR I-9427. There was one more open skies case initiated by the Commission on 20 January 2004 against the Netherlands, case C-523/04 *Commission v Kingdom of the Netherlands* [2007] ECR I-3267. The UK's agreement was not actually an open skies agreement, the Commission included the UK only due to the majority ownership and effective control rules of the Bermuda II agreement.

138 Air fares charged by third country airlines on intra-EU routes and CRSs used in the territory of Member States. See *Open Skies Austria* case (n 137) paras 105-145.

139 See C-307/97 *Saint-Gobain v Finanzamt Aachen-Innenstadt* ECR [1999] I-6161, para 59; case C-55/*00 Gottardo v INPS* [ECR] I-413 para 32.

concluded by a Member State other than their home country,[140] as well as limiting the total available advantages of the internal market. Consequently, the Member States failed to fulfil their obligation under the Treaty.

Concerning the ownership and control clauses, the Commission gained a clear victory. In relation to external competence, the Commission achieved only a marginal victory and only 'secured' exclusive external competence in relation to fares and CRSs. Member States still retain the competence to negotiate agreements on essential parts of ASAs, the so-called 'hard rights'.

4.3.3.3 Aftermath of the *Open Skies* judgments, external aviation relations at present

The Commission tried to seize the opportunity and make the most of the *Open Skies* judgments, therefore adopting a rather hard-line position as to the interpretation and consequences of the Court of Justice ruling.[141] The Commission held that the illegality problem of ASAs entailed a comprehensive international aviation policy which has to be elaborated upon in order to address the problem.[142] This is necessary due to the value added when compared with the effort of individual Member States. In the Commission's opinion, 'the only way to proceed is in a coordinated manner, using the Community institutions'.[143] The Commission thought that bringing ASAs in line with EU law would be achieved by negotiating new EU level agreements. Member States disagreed and insisted upon their involvement in future negotiations. In February 2003, the Commission had already formulated a proposal which sought to achieve a compromise.[144] It stressed that, in the case of limited traffic rights, capacity or frequency, distribution and allocation should be non-discriminatory and made between airlines having equal rights, irrespective of their nationality. Concerning the role of EU institutions and Member States in international relations,

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140 *Open Skies Austria* case (n 137) paras 138-145.

141 Communication from the Commission on the consequences of the Court judgements of 5 November 2002 for European air transport policy COM (2002) 649 final.

142 ibid para 39.

143 ibid para 42.

144 COM (2003) 94 final; Proposal for a European Parliament and Council Regulation on the negotiation and im-plementation of air service agreements between Member States and third countries 2003/0044 (COD).

it is established that joint action by both parties is required.[145]

The Commission therefore proposed a package of measures containing a full mandate from the Council to negotiate an open aviation area agreement with the US, a general mandate to negotiate aviation issues of exclusive EU competence, and a draft regulation providing a coordination and information exchange mechanism between the Commission and the Member States to ensure coherent outcomes from the bilateral discussions which Member States and the Commission have with different partners. On 5 June 2003,[146] the Council authorised the Commission to negotiate an EU level ASA with the US,[147] a comprehensive, liberal air service agreement that would establish an open aviation area between the EU and the US. The Council also endorsed the mandate necessary for the correction of Member States' ASAs in light of the *Open Skies* judgments (horizontal mandate).[148] Finally, the Council also decided upon a general approach on the draft Regulation on the negotiation and implementation of air service agreements between Member States and third countries.

Accordingly, external aviation negotiations can be pursued in the following ways: Concerning certain key partners, the Commission received, and requires in the future, an individual mandate ensuring exclusive competence on all aspects of aviation.[149] With the horizontal mandate, the Commission can pursue negotiations with any third country in relation to ownership clauses or fares.[150] On the other hand, Member States also retain their right to negotiate with third countries.[151]

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145 ibid para 24.

146 2515th meeting of the Council 9686/03 (Presse 146), 03/06/2003.

147 The text of the decision is set out in document 11322/03.

148 The text of the decision is set out in document 11323/03.

149 See Communication from the Commission: A Community aviation policy towards its neighbours COM (2004) 74 final; Communication from the Commission: Developing the agenda for the Community's external aviation policy COM (2005) 79 final.

150 A horizontal agreement is an agreement concluded by the Commission, based on its horizontal mandate, on behalf of Member States with particular third countries to bring their existing bilateral ASAs in line with EU law, as provided for in the *Open Skies* judgments. Probably the most important changes are related to designation, ownership and control: national designation is replaced by EU designation. The Commission and Member States have now successfully negotiated horizontal agreements with 117 third countries and – in total – have modified nearly 1000 bilateral ASAs on behalf of Member States. See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - The EU's External Aviation Policy - Addressing Future Challenges COM (2012) 556 final (2012 Communication) 3 and 15.

151 Parliament and Council Regulation (EC) 847/2004 of 29 April 2004 on the negotiation and

4.3.3.3.1 The ECAA and other neighbouring countries

The European Common Aviation Area (ECAA) agreement[152] is based on the mutual market access to the air transport markets of the contracting parties and the freedom of establishment, with equal conditions of competition and respect for similar rules, including in the areas of: safety, security, air traffic management, social harmonisation and the environment.[153] It enables the extension of the internal aviation market to countries in South East Europe. The agreement prohibits discrimination on the grounds of nationality and secures the right of establishment.[154] Competition rules are included in Annex III of the agreement and cover restrictive agreements, abuses of a dominant position and state aid. In practice, the ECAA agreement will see all Balkan countries adopt and apply a competition regime wholly compatible with EU law.

The EU has also opened and/or concluded negotiations with other important neighbouring countries.[155] The Ukraine is treated as a priority country with the aim of integrating the Ukraine within the European aviation area.[156] In the Mediterranean region, Morocco is the primary partner for the EU and the first country to finalise a new type of aviation agreement with it, called the Euro-Mediterranean Aviation Agreement.[157] In 2010, Jordan signed a similar agreement.[158] In 2012, the EU and

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implementation of air service agreements between Member States and third countries [2004] OJ L157/7.

152 *Multilateral Agreement between the European Community and its Member States, the Republic of Albania, Bosnia and Herzegovina, the Republic of Bulgaria, the Republic of Croatia, the former Yugoslav Republic of Macedonia, the Republic of Iceland, the Republic of Montenegro, the Kingdom of Norway, Romania, the Republic of Serbia and the United Nations Interim Administration Mission in Kosovo on the Establishment of a European Common Aviation Area (ECAA)* [2006] OJ L285/3 - approved by Decision of the Council and of the representatives of the Member States of the European Union meeting within the Council of 9 June 2006, 2006/682/EC [2006] OJ L285/1.

153 ibid recitals and Article 1.

154 ibid Articles 6 and 7.

155 The EU reached an agreement to integrate Georgia into the ECAA. Decision of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 15 October 2010 on the signature and provisional application of the *Common Aviation Area Agreement between the European Union and its Member States, of the one part, and Georgia, of the other part* 2011/50/EU [2011] OJ L25/1. A similar agreement was concluded with Moldova on 26 June 2012 (see IP/12/688 26/06/2012).

156 2772nd meeting of the Council 15900/06 (Presse 343), 11-12/12/2006; see also: IP/06/1773 12/12/2006.

157 *Euro-Mediterranean Aviation Agreement between the European Community and its Member States, of the one part and the Kingdom of Morocco, of the other part* [2006] OJ L386/57 - approved by Decision of the Council and of the representatives of the governments of the Member States, meeting within the Council of 4 December 2006, 2006/959/EC [2006] OJ L386/55.

Israel signed an agreement creating an open aviation area between Israel and the EU, based on common rules.[159] In September 2012, the Commission proposed further steps in the EU's external aviation policy. It set the target of completing aviation agreements with neighbouring countries such as Ukraine, Azerbaijan, Tunisia, Turkey and Egypt by 2015 and asked for this purpose for a general negotiating mandate for these countries.[160]

4.3.3.3.2 Open aviation area with the US

For the EU, by far the most important of all third country partners is the US. According to an economic report prepared in January 2007, an EU-US agreement would generate 26 million additional passengers over 5 years.[161] It would produce economic benefits worth EUR 6.4-12 billion in the form of consumer surplus, and would also create 72 000 new jobs in the new EU-US market. An EU-US open aviation area would amalgamate the world's two largest and most developed aviation markets with annual passenger numbers of 712 and 650 million respectively,[162] which would probably serve to trigger a complete transformation of the global industry.[163]

The Commission's negotiating mandate explicitly recognised the possibility of creating the open aviation area in several steps, taking into account the US' opposition to certain issues like cabotage in the US or foreign ownership in US airlines. Negotiations began in October 2003 and a breakthrough was achieved in March 2007. After additional rounds of negotiations, the parties gave their support to

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158 *Euro Mediterranean Aviation Agreement between the European Union and its Member States, of the one part, and The Hashemite Kingdom of Jordan, of the other part* – approved by Decision of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 15 October 2010, 2011/181/EU [2011] OJ L79/1.

159 See press release IP/12/307 (22/03/2012) EU-Israel aviation agreement: Israel joins Europe in aviation.

160 2012 Communication (n 150).

161 The economic impacts of an open aviation area between the EU and the US – prepared by Booz Allen Hamliton for DG TREN, January 2007, available at: <ec.europa.eu/transport/air/international_aviation/country_index/doc/final_report_us_bah.pdf> accessed 31 December 2012.

162 For the year 2004, ibid page ii.

163 See in particular *Air Transport Agreement between the European Community and its Member States, on the one hand, and the United States of America, on the other hand* [2007] OJ L134/4 (EU-US Agreement) – approved by Decision of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 25 April 2007, 2007/339/EC [2007] OJ L134/1, last recital: 'Intending to establish a precedent of global significance to promote the benefits of liberalization in this crucial economic sector'.

an improved text, which the Council approved unanimously. The text contained safeguard measures which, it was intended, would ensure that the second stage agreement - which involves realising the open aviation area - would be concluded within a reasonable time.[164] The first stage agreement was signed at the EU-US Summit on 30 April 2007 in Washington[165] and entered into force on 30 March 2008.[166]

The first stage agreement, an open skies deal, is a milestone in the international aviation relationships of the EU, which replaced existing bilateral ASAs or, in the case of six Member States, even created a relationship with the US. The aims of the agreement include: establishing an aviation system based on competition among airlines with minimum government interference open access to markets. Airlines of both parties are granted unlimited third, fourth and fifth freedom rights.[167] This means that any EU airline can fly from any European point to any US destination or beyond/behind and *vice versa*.[168] In addition, EU airlines are allowed to fly certain seventh freedom routes as well.[169] There are no limitations whatsoever concerning routing, frequency, capacity[170] or pricing.[171]

With regard to the crucial ownership and control issues, Annex IV of the EU-US Agreement provides some respite. The investment of EU investors in US airlines will be considered in a more benign manner.[172] Moreover, EU airlines can acquire control over ECAA, EEA and certain African airlines[173] without fear of losing their traffic rights due to objection from the US. The agreement deals comprehensively with several areas of aviation.[174] Article 20 declares that the parties will vigorously apply their competition rules respectively and seek to minimise potential differences

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164 EU-US Agreement (n 163) Article 21. 2791st meeting of the Council 7272/07 (Presse 51), 22/03/2007.

165 EU-US Agreement (n 163).

166 With the start of the 2008 IATA Summer Season.

167 EU-US Agreement (n 163) Article 3(1).

168 eg Lufthansa could fly directly between London Heathrow and San Diego, which would have once been unimaginable due to Bermuda II and nationality clauses.

169 EU-US Agreement (n 163) Article 3(1)(c)(ii).

170 ibid Articles 3(2) and 3(4).

171 ibid Article 13.

172 ibid Annex IV Article 1.

173 ibid Annex IV Article 2.

174 Safety (Article 8), security (Article 9); commercial opportunities (Article 10); charges (Article 11 Custom duties and charges and Article 12 User charges); environment (Article 15); CRS (Article 17); subsidies (Article 14).

that can arise. Annex II of the agreement provides detailed rules of cooperation including scope, area and methods.

On 25 March 2010, a stage two agreement was reached between the EU and the US.[175] In comparison to the first stage agreement, the parties made progress with regards to environmental, security, and labour issues. Despite progress being achieved, ownership and control rules, as well as 7th freedom traffic rights, will only enter into effect at a later stage subject to legislative changes at both sides.

4.3.3.3.3 Targeted negotiations with other third countries

Besides its agreement with the US, the EU also managed to negotiate a similarly ground-breaking agreement with Canada,[176] which was endorsed by the Council on 30 March 2009. The EU and Brazil also initialled a comprehensive agreement on air transport services in March 2011.[177] The Commission asked expressly for a negotiating mandate in the case of Russia,[178] China,[179] Chile,[180] and India.[181] In 2008, the Council authorised the Commission to open negotiations with Australia and New Zealand on comprehensive air transport agreements.[182] The Commission confirmed again the importance of comprehensive aviation agreements with key partners in 2012.[183]

4.4 Basic airline economics

Button and Stough provide a useful summary of the peculiarities of air transport.[184] 'Airline operations have a number of peculiar economic features that need to be

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175 *Protocol to amend the Air Transport Agreement between the United States of America and the European Community and its Member States*, signed on 25 and 30 April 2007 [2010] OJ L223/3 – approved by Decision of the Council and the Representatives of the Governments of the Member States of the European Union, meeting within the Council of 24 June 2010, 2010/465/EU [2010] OJ L223/1.

176 *Agreement on Air Transport between Canada and the European Community and its Member States* [2010] OJ L207/32 – approved by Decision of the Council and the Representatives of the Governments of the Member States of the European Union, meeting within the Council of 30 November 2009, 2010/417/EU [2010] OJ L207/30.

177 See press release IP/11/327 (18/03/2011) Breakthrough in EU-Brazil negotiations on far-reaching aviation agreement.

178 COM (2005) 77 final.

179 COM (2005) 78 final.

180 COM (2005) 406 final.

181 COM (2005) 409 final.

182 2877th meeting of the Council 10410/08 (Presse 165), 11-12/06/2008.

183 2012 Communication (n 150).

184 Button 2000 (n 51) 15-16.

viewed as an entity. They provide network services that are non-durable (in the sense that once a flight leaves, it has been "consumed"). For any flight there is a finite capacity involving the carriage of a variety of different clients, not only passengers and freight but also various classes of passengers. These different classes extend beyond explicit divisions into such categories as "business class" and "coach" and embody differences in time preferences, fares, and ticket flexibility that characterise the vast diversity of users of air transportation. Airlines provide an intermediate product (few people travel for the pure pleasure of it, but rather because of what they will find at the destination) and air transportation imposes externalities on third parties (such as environmental effects). There are also various forms of economy associated with scale of the services provided, the length of time an operator has served a market and the structure of the network adopted.'

While none of these features are unique in themselves, their combination does pose specific problems when trying to understand the economics of the industry.[185]

4.4.1 Drivers and characteristics of air transport demand

Doganis identifies two groups of factors that affect demand for air travel.[186] The first group affects all markets, these are: incomes; supply conditions (fare and quality); the level of economic activity; population size and growth rate; and the social environment (length of holidays, attitude to travel). The other group of factors affect demand in a particular market, on a given route. This includes: the level of tourist attractions; exchange rate fluctuations, historical and cultural links; earlier population movements; labour flows; and the nature of economic activities.

The most important factors from the first group, otherwise known as macro-level drivers, are income levels which are closely related to economic growth and declining real prices. Analysts believe that for increases in demand for air transport GDP growth can be used as a good proxy.[187] Demand for air transport grows at a multiple of GDP growth.[188] Since the demand for air transport is derived demand,

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185 ibid.

186 Doganis 2010 (n 2) 192.

187 S Holloway, *Straight and level: practical airline economics* (3rd edn Ashgate Publishing 2008) (Holloway 2008) 88-90.

188 See R Love, J Goth, F Budde, D Schilling and B Woffenden, 'Understanding the demand for air travel: how to compete more effectively – meeting the new challenges of the airline industry'

connected in part to the general economic climate, the level of economic activities has a strong and direct influence on business travel and, indirectly, on leisure travel. Increased economic activity generates employment and, thus, an increase in business travel.[189] On the other hand, economic prosperity increases household income, which also leads to an indirect increase in leisure travel.[190] A small population base can limit demand for air travel, even in the presence of large incomes. The dynamic population growth of India and China, on the other hand, clearly explains the rapid development of their air transport industries. Attitudes towards travel can be best illustrated by comparing traffic developments between Poland/UK-Ireland and Hungary/UK-Ireland. After EU accession, many Polish workers travelled to the UK and Ireland to take advantage of the open employment market, while Hungarians seemed to be reluctant to do so. As a consequence, Wizzair flies on 21 routes from Poland compared with two routes from Hungary.[191]

On the route level, the level of tourist attractions can influence demand. Development of a particular region as a tourist destination, the level of services, infrastructure, and the climatic conditions can each serve as an explanation for increases in demand. Historical and cultural links could be between countries and their earlier colonies. Large population movements, like the one between France and North Africa, can validate demand for air transport. There are unpredictable random factors like the 2003 SARS epidemic or the 9/11 terrorist attacks, as well as war or natural disasters that can also determine demand. In 2011, Air France/KLM was largely hit by the events of the 'Arab Spring' and the tsunami in Japan, since it had particularly strong positions on routes to these regions.

Demand for air transport has several important characteristics: it can be strongly influenced by the supply of output, fluctuation, and sometimes directionality.[192] With the help of price discrimination, revenue management, and loyalty programs – such as FFPs and travel agency commission overrides (TACOs) – airlines are themselves able to influence demand. With the aid of FFPs, they can change price elasticities.

(Boston Consulting Group 2006); Doganis considers that there is a 2 to 1 relationship between air transport demand and world GDP (Doganis 2010 (n 2) 192).

189 B Vasigh, K Fleming and T Tacker, *Introduction to air transport economics* (Ashgate Publishing 2008) (Vasigh 2008) 19.

190 ibid.

191 As of 21 May 2012.

192 Holloway 2008 (n 187) 96.

By manipulating supply, carriers can enhance demand. The 'quality' attributes of an air service – including: frequency, departure and arrival times, and available capacity – have a demand-increasing effect, especially among business travellers.[193] The increase in demand is the result of the 'S-curve' effect.[194] When a carrier dominates output, it will get a disproportionately large market share.[195] The phenomenon of when a larger network increases demand is often referred to as revenue economies of scale/scope or demand-side economies of scope.

Air transport is characterised by fluctuation, which can be cyclical, periodic or irregular. Cyclical fluctuations follow economic cycles with larger amplitude. Periodic fluctuation can be further divided into seasonal, weekly and daily peakings. Seasonal peakings refer to demand peaks within the year, for example, due to climatic reasons (eg summer). Weekly peakings concern the travel patterns of businessmen in the weekdays and leisure travellers in the weekends.[196] Daily peakings are in the morning and the evening. Finally, there are irregular peakings, ie in the case of sporting events like football tournaments, which generate large traffic in particular periods.[197] 'Directionality' means that there is a difference in demand for the outbound or inbound flight on a certain route. For example, on Friday evening there is huge demand for air travel to Las Vegas, while on Sunday evening there is high demand out of Las Vegas.[198] However, in the opposite direction at the same time demand is virtually non-existent.

To understand markets, its segmentation could be useful. Segmentation is based on the assumption that customers are different and that they react in different ways by representing different demands and, according to these variations, they can be

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193 ibid 50.

194 See W Wei and M Hansen, 'Impact of aircraft size and seat availability on airlines' demand and market share in duopoly markets' (2005) 41 Transportation Research Part E 315; M Tretheway and T Oum, *Airline Economics-Foundations for Strategy and Policy* (Centre for Transportation Studies, University of British Columbia 1992) (Tretheway and Oum) 27-28; U Binggeli and L Pompeo, 'Analyst viewpoint, does the S-curve still exist?' (2006) IATA Economics, available at: <http://www.iata.org/whatwedo/Documents/economics/McKinsey_SCurve.pdf> accessed 31 December 2012; WE Fruhan Jr, *The fight for competitive advantage: a study of the United States domestic trunk carriers* (Harvard Business School 1972); G Eads, 'Competition in the domestic trunk airline industry: too much or too little?' in A Phillips (ed), *Promoting competition in regulated markets* (The Brookings Institution 1975).

195 Holloway 2008 (n 187) 99.

196 ibid 54.

197 Vasigh 2008 (n 189) 60.

198 ibid.

grouped together.[199] The most common segmentation is business and leisure travellers, and sometimes the category 'visiting friends and relatives' (VFR) is added. These groups can have different demand and different quality needs. Business travellers are less concerned about prices, tend to book only a few days before departure and value good quality in the form of convenient schedules, ticket flexibility, on board services or non/stop services. Leisure travellers are generally more price sensitive, tend to book well in advance of their flight and are prepared to travel on connecting flights.

4.4.2 Supply-side characteristics of air transport

The supply or output of a passenger airline is measured in available seat-miles or available seat-kilometres which means that the output unit is one seat carried on one mile or kilometre. According to Holloway,[200] supply in the air transport sector has the following distinctive characteristics. Firstly, adding output improves the quality of the product in customers' eyes. The first option is adding output with frequency unchanged, eg larger aircraft, which means more empty seats. Business travellers value this increased seat availability. As these passengers contribute a disproportionately larger amount to the total revenue of a flight than low fare passengers, the loss from empty seats could be more than compensated. Increasing output in the form of more flights improves the choice of departure time, which is an important aspect of product quality and, again, is valuable for business passengers.

An explanation can be given with the introduction of time cost, or the opportunity cost of not travelling at the preferred time. Whenever a passenger cannot travel at the preferred time because of a full booking or the small number of frequencies, he/she is making a trade-off between the actual and preferred departure/arrival time. The level of opportunity cost per time unit can be referred to as the time sensitivity of passengers.[201] Douglas and Miller investigated the phenomenon and introduced the concepts of frequency and stochastic delay.[202] Frequency delay means the time cost arising from the number of flights, while stochastic delay refers to time cost caused

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199 ibid 62.
200 ibid 195-198.
201 Fischer 1997 (n 34) 22.
202 GW Douglas and JC Miller III, 'Quality Competition, Industry Equilibrium and Efficiency in the Price-Constrained Airline Market' (1974) 64 American Economic Review 657.

by the non-availability of empty seats. The increase of frequency decreases frequency delay, and the increase of empty seats reduces stochastic delay.

According to the next feature, airline seats are perishable products. Consumers need to be physically present to receive the product; unsold output is lost as soon as the aircraft takes off, as storage is not possible. Production and consumption takes place at the same time, pressuring producers to take whatever price they can get for the product. Even a relatively low price contributes towards the high fixed cost of a flight. The small group of business travellers is extremely important for airlines as they contribute disproportionately towards total revenue. Output customisation is limited. Supply in the short run exhibits significant rigidity. Fixed costs are high.

4.4.3 Drivers and characteristics of airline costs

The characteristics of fixed, variable and marginal cost in the air transport market are as follows: Supply is provided by expensive indivisibilities (aircraft), which rarely ever meet the exact level of demand. Although aircraft are produced in different sizes, capacity is necessarily limited and after full booking, capacity cannot be increased just by seats as measurement of unit. If extra capacity is needed, a larger aircraft or new frequency has to be added. Therefore, fixed costs form a significant part of the total cost. The aircraft, in itself, represents a considerable expense, no matter how many passengers are on board. It needs the same two pilots, the minimum number of cabin crew, the same maintenance and ground handling and, furthermore, the same airport charges have to be paid. It is true that fuel consumption, the cost of meals for passengers, travel agency commissions and passenger handling charges may be lower but these expenses appear relatively small in relation to fixed costs. Under these conditions, marginal cost and variable cost can be treated as equivalents. On the other hand, marginal cost can represent the entire cost of adding a new aircraft when extra capacity is needed.

Doganis classified the following elements as the most important cost determinants:[203] externally determined cost drivers; labour; aircraft type; route network; airline marketing and product policy; financial policies; corporate strategy and quality of management.

[203] Doganis 2010 (n 2) 90-130.

Cost of labour accounts for a significant part of total airline costs. As an aircraft is a sophisticated, hi-tech piece of equipment, it is understandable that the crew operating or repairing it has to be paid and trained well which costs money. The next cost item is fuel, which now represents at least 30%,[204] having previously accounted for 12-15%,[205] of airline expenses; owing to the price of jet fuel having more than doubled since 2008.[206] Airlines have to pay en-route charges for air traffic control, airport charges for landing at and using airports, and ground handling fees for ground services. Long-haul operators have lower airport costs due to fewer landings. Short-haul airlines with large frequency can spend significant amounts on landing fees. Distribution costs depend on the method in which airlines choose to sell their tickets. Most airlines pay a commission to travel agents, however, as part of the recent trend of continuous cost cutting, airlines rely more and more on direct sales through their own websites.

Fleet composition significantly affects an airline's costs. It is widely accepted that larger aircraft have lower operating cost per unit of output.[207] This means that an aircraft of double size shall not result in double the operating costs. It will be lower per seat kilometre. Of course, in absolute terms the operating cost of a wide-body aircraft is much higher but it has a greater capacity as well, so these costs will disperse to more seats. Larger aircrafts have a proportionately lower drag and higher payload per unit of weight. Furthermore, their maintenance costs are also proportionately lower.[208] Some call this effect 'aircraft economies of scale'. Fleet commonality drives cost down. Crew training, maintenance and ground handling can be cheaper when one or only a few types - or at least a large amount of the same type - are introduced. This is the reason why low-cost airlines choose a single type for their operations.

High aircraft speeds lower unit cost, as a faster aircraft produces more output in the

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204 IATA Economic Briefing, Airline fuel and labour cost share (February 2010), available at: <www.iata.org/whatwedo/Documents/economics/Airline_Labour_Cost_Share_Feb2010.pdf> accessed 31 December 2012.

205 Doganis 2010 (n 2) 93.

206 IATA jet fuel price development, available at: <http://www.iata.org/publications/economics/fuel-monitor/Pages/index.aspx> accessed 31 December 2012.

207 eg the new Airbus A380 significantly lowers the cost per seat, see in: <http://www.airbus.com/aircraftfamilies/passengeraircraft/a380family/> accessed 31 December 2012.

208 Doganis 2010 (n 2) 103.

same period, which allows costs to be spread more widely.[209] Every aircraft has a maximum range with a maximum payload. After reaching the maximum range, it has to decrease payload to fly further, which means lower output and, therefore, rising unit costs. An airline can operate an aircraft at its cheapest if it flies with maximum payload on routes, which corresponds precisely to the maximum range it is capable of. On longer routes, the aircraft spends more time in the air and flies with higher average speeds.

Block time is the period from 'engines on' to 'engines off'.[210] Block speed indicates the average speed, while block fuel denotes the average fuel consumption in the same period. An aircraft is much more efficient in the air than on the ground. Unnecessary waiting at the airport, climbing out of the airport and the descent phase of the flight reduces block speed and increases block fuel. During a longer stage, the inefficient phases represent a much smaller proportion of the block time and, as such, these effects are compensated with higher speed and lower fuel consumption. This improves unit cost. On short-haul services, however, it is not possible to spread the cost of the 'expensive' parts; therefore, unit costs can be noticeably higher. Stage length has the same effect: with a longer stage, output is higher and consequently the same expenditure is lower on a per unit basis.

Following deregulation, in seeking to take advantage of free entry to markets, airlines dramatically restructured their networks by concentrating in space and time traffic to particular airports, the so-called hubs.[211] With the help of hubs, airlines gather and distribute traffic from multiple origins to multiple destinations using the airport as a transfer point. This network structure can provide various cost advantages.[212]

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209 On the other hand, an aircraft like the Concorde has proporionately higher fuel consumption, which seemed to be a crucial factor in the high priced oil environment observed today; eventually causing the demise of the supersonic passenger transport concept at both Airbus and Boeing.

210 Doganis 2010 (n 2) 106.

211 A Reynolds Feighan, 'Traffic distribution in low-cost and full-service network carriers in the US air transport markets' (2001) 7 Journal of Air Transport Management 265; G Burghouw, J Hakfoort, and J Ritsema van Eck, 'The spatial configuration of airline networks in Europe' (2003) 9 Journal of Air Transport Management 309.

212 With regard to the economies and effects of the hub-and-spoke network see: TH Oum, A Zhang and Y Zhang, 'Airline network rivalry' (1995) 28 Canadian Journal of Economics 836 (Oum Zhang and Zhang 1995); K Hendricks, M Piccione, G Tan, 'Entry and exit in hub-and-spoke networks' (1997) 28 The RAND Journal of Economics 291 (Hendricks Piccione and Tan 1997);

The first advantage is economies of density. Economies of density arise when unit cost declines as the volume of traffic carried within an unchanged network increases.[213] The primary source of economies of density is the aforementioned advantage derived from aircraft size and improved utilisation. Density can increase due to natural growth over time, based on low prices or most importantly due to the network design of the airline.[214] In the hub-and-spoke system, by combining the passengers' itineraries, airlines manage to increase traffic density. In a point-to-point network, these passengers would have used separate and, most probably, smaller aircrafts.

Based on the extent of density increase, the effect could be that of a higher load factor, an increase of capacity within the same aircraft (more seats), an increase of capacity leaving frequency unchanged (larger aircraft) and, finally, increased frequency.[215] A larger aircraft with the same load factor means proportionately the same percentage of empty seats but - in real numbers - more empty seats, which could increase the service quality in the eyes of business travellers. More frequency also has a demand enhancing effect. Increased demand can, in turn, result in higher density and we see a self-reinforcing process. This is the Mohring effect.[216] Empirical studies confirm that economies of traffic density can be significant.[217] A 1% increase in output only results in a 0.8% increase in costs. However, once the minimum efficient traffic density level is reached, there are no more gains associated

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JK Brueckner and PT Spiller, 'Competitions and mergers in airline networks' (1991) 9 International Journal of Industrial Organization 323; K Hendricks, M Piccione, G Tan, 'The economics of hubs: the case of monopoly' (1995) 62 Review of Economic Studies 83; JK Brueckner and Y Zhang, 'A model of scheduling in airline networks – How a hub-and-spoke system affects flight frequency, fares and welfare' (2001) 35 Journal of Transport Economics and Policy 195; JK Brueckner, NJ Dyer and PT Spiller, 'Fare determination in airline hub-and-spoke networks' (1992) 23 The RAND Journal of Economics 309; JK Brueckner and PT Spiller, 'Economies of traffic density in the deregulated airline industry' (1994) 37 Journal of Law and Economics 379; A Zhang, 'An analysis of fortress hubs in airline networks' (1996) 30 Journal of Transport Economics and Policy 293; D Caves, LR Christensen and MW Tretheway, 'Economies of Density versus Economies of Scale: Why Trunk and Local Service Airline Costs Differ' (1984) 15 RAND Journal of Economics 471 (Caves Christensen Tretheway 1984).

213 Holloway 2008 (n 187) 287.

214 ibid 299-300.

215 ibid 288.

216 Competitive Airlines - Towards a more vigorous competition policy in relation to the air travel market; Report from the Nordic competition authorities No. 1/2002 (Competitive airlines) 45. Available at: <http://www.kilpailuvirasto.fi/tiedostot/competitive-airlines.pdf> accessed 31 December 2012.

217 Caves Christensen Tretheway 1984 (n 212).

with greater density.[218]

Economies of scope arise when it is cheaper to produce two or more products together for a single undertaking, than to produce each product by separate undertakings. Economies of scope are present when two airline products share production costs (joint carriage of two passenger classes or passengers and cargo on the same aircraft), or marketing costs (the general advertising affects several markets).[219] In a hub-and-spoke system, an airline can use various facilities associated with a particular flight leg in the production of other products.

Holloway divided competitive scope into two elements: geographic scope and product scope.[220] For example, the addition of a new spoke to a hub means that the costs of a hub will be spread over multiple routes. In other words, the cost of an additional route is more than compensated by the increased traffic, which lowers cost. Product scope concerns the joint production of products of different quality such as *first*, *business* and *economy* class. Here, the costs will be dispersed among the different cabin classes. Economies of scale imply that unit cost falls as the aggregate output increases. Certain activities within airline operations show noticeable economies of scale. This is the case with fleet commonality, maintenance, external purchases, ground handling and marketing activities. There is a debate as to whether the economies in advertising are scale or scope economies. Some researchers refer to these phenomena collectively as 'economies of size'.[221]

Finally, Button and Stough argue that there could be economies of experience that favour incumbent airlines against new entrants.[222] For example, the goodwill of the incumbent, its better market knowledge and organisation provide advantages and at the same time higher cost for the entrant. Learning, as a cost decreasing factor, can have similar origins.

4.4.4 Characteristics of pricing

Pricing is a fundamental element of airline operations as its aim is to maximise

218 MW Tretheway, 'Globalization of the Airline Industry and Implications for Canada' (1990) 26 December Logistics and Transportation Review 4.
219 Holloway 2008 (n 187) 302.
220 ibid 302-303.
221 Tretheway and Oum (n 194), mentioned by Goetz 2002 (n 27) 4.
222 Button 2000 (n 51) 24.

revenue from price inelastic demand and to stimulate demand from the elastic part in order to fill otherwise empty seats.[223] Profit maximisation and profitability should be secured. Pricing is supplemented with revenue management.[224] Pricing creates a fare structure with the connected conditions, while revenue management allocates seats to these fare categories.

Airline operations have large fixed costs and low variable costs. Airline products are perishable and the market is composed of different consumer groups with different demand characteristics. Therefore, applying uniform prices is not always feasible. With a uniform price, certain price sensitive passengers will not travel and their seats will be empty. On the other hand, low prices that enable everybody to travel are not appropriate to cover the associated costs of the flight. Therefore, airlines try to price discriminate among passengers by earning on price inelastic passengers and filling up the remaining empty seats with price sensitive passengers, while preventing revenue dilution.

From an airline point of view, every passenger should ideally pay according to his/her willingness to pay. The preconditions of effective price discrimination are: the existence of a downward sloping demand curve; sufficiently identifiable, large and distinct passenger groups; the ability to control diversion from high-yield to low-yield fares; and assurance that the incremental cost of administering the fare structure shall not exceed the incremental revenue it generates.[225] Different passenger groups pay different prices.

In practice, airlines use 'fences' to avoid revenue dilution. These fences are the various conditions attached to fare classes like duration limits on stay, ticket refundability, change fees, purchase time restrictions or the requirement that the name of the passenger should be on the ticket.[226]

In the airline industry, price discrimination helps to extend the market, increase demand and output, and cover high fixed costs. This creates economies of traffic density, which lowers unit cost and, most probably, prices as well. The low price

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223 Holloway 2008 (n 187) 133-136.
224 See more in detail on this topic in Vasigh 2008 (n 189) 280-306.
225 Holloway 2008 (n 187) 137 (partly).
226 Vasigh 2008 (n 189) 289-294.

passengers can increase density to the extent that additional frequencies can be introduced on a route which, in turn, can enhance demand from high-yield business travellers who value high frequency.

After a tariff structure has been created which takes account of the abovementioned considerations, in the ambit of revenue management fare bases are assigned to fare classes and the seat inventory is allocated among these classes and managed until departure.[227] According to Holloway, revenue management is the practice of controlling the availability of seats for sale at different fares and subject to different conditions, with a view to maximising revenue. Therefore, it plays a vital role in price discrimination and the successful operation of an airline.[228] A revenue management system uses sophisticated software for these purposes.

4.4.5 Airline networks, hub-and-spoke system

Before deregulation, route licenses in the US were granted with little regard to economies of supply. As a result, connection with own flights or the flights of other airlines was not important. In the rest of the world, where air transport inevitably has an international character due to the smaller size of those countries, bilateral ASAs created a route structure that looked like a hub-and-spoke system. Following deregulation, airlines rapidly changed and redesigned their networks to exploit advantages of the economies described above.

They created the hub-and-spoke system. The real novelty of this system was schedule coordination among the own flights. Inbound flights from various destinations are organised into banks or waves, ie incoming flights are concentrated in a short period of time. After transferring passengers to other flights, a similar number of outbound flights depart the airport en route to several different destinations. A window is the period between the arrival of the first inbound and the departure of the last outbound flight.[229] A short window means good connection times and, therefore, increased quality for consumers, while a longer window would allow for more connections. The whole process of incoming banks, transfer and

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227 ibid 522.

228 Robert Crandall (CEO and Chariman of AMR) once said that 'revenue management is the single most important technical development in transportation management since we entered the era of airline deregulation in 1979'. See Vasigh 2008 (n 189) 279.

229 ibid 378.

outgoing banks is called a 'complex'. Large airlines schedule several complexes at their hub airports during a day.

The hub-and-spoke system multiplies the number of available destinations. More importantly, it can serve many more cities with greater efficiency. See the following table based on Hanlon 2008:[230]

Number of spokes	Maximum number of connecting markets	Number of local markets	Maximum number of city pair markets
n	n(n-1)/2	n	n(n+1)/2
5	10	5	15
50	1225	50	1275

Table 4.1 Hub-and-spoke systems

This vast number of possible markets allows carriers to serve routes that would not even be economically viable in a point-to-point system. The combination of passengers' itineraries increases traffic on each of the spokes and often only this additional traffic validates the connection or number of frequencies between certain cities. In fact, around half of air transport markets are too small to justify even one daily direct flight.[231] Serving numerous destinations from a hub also results in more

230 Hanlon 2007 (n 35) 127.

231 W Swan, 'Airline network evolution and the role of aircraft technology' (Annual Lecture of Airneth, Schipol, 15 January 2010) available at: <www.airneth.nl/index.php/doc_view/1013-presentation-dr-william-swan-airline-network-evolution-and-the-role-of-aircraft-technology.html?format=raw&tmpl=component> accessed 31 December 2012;
See also: D Lee, 'US industry outlook: presentation to Embraer' (29 May 2007) available at: <http://kasperlee-aviation.com/thought_leadership/Lee%20Embraer%20Presentation.pdf> accessed 31 December 2012;
W Swan, 'Misunderstandings about airline growth' (2007) 13 Journal of Air Transport Management 3, 4;
ME Levine, 'Airline consolidation: how will it reshape the industry? What does it mean for Europe?' (First Annual Airneth Lecture, Schipol, 11 March 2009) 7, available at: <https://www.airneth.nl/index.php/doc_download/865-airneth-annual-lecture-by-prof-michael-e-levine-airline-consolidation-how-will-it-reshape-the-airneth-annual-lecture-by-prof-michael-e-levine-airline-consolidation-how-will-it-reshape-the.html?q=levine> accessed 31 December 2012;
ME Levine, 'Airline alliances and systems competition: antitrust policy toward airlines and the Department of Justice guidelines' (2008) 45 Houston Law Review 333, 336;
Transatlantic airline alliances: competitive issues and regulatory approaches, a report by the European Commission and the United States Department of Transportation (16 November 2010)

efficient advertising since, from a general campaign, all products benefit, ie the cost of marketing is spread out to several city pairs. Hub-and-spoke networks can also have the advantage of deterring market entry to the benefit of airlines.[232]

On the other hand, hub-and-spoke networks can have disadvantages. Transporting passengers in a hub-and-spoke network requires at least two flight legs at shorter stage lengths, which involves two take-offs and landings, groundhandling and maintenance checks. Shorter stage length entails higher unit costs. Airlines have to pay twice the airport charges and passenger fees, as well as needing to acquire maintenance services connected to the number of take-offs/landings. Establishing a hub is expensive. Hubs can increase congestion leading to a worsening of block speed and block fuel. Since passengers generally prefer direct connections, airlines have to provide a discount to compensate the traveller for lost time, thus resulting in lower yields.[233] Therefore, the cost economies from hubbing would, ideally, more than compensate for any negative effects. This can depend on the proportion of local traffic travelling between the hub and particular spokes. Provided that a carrier dominates its own hub, it can charge an extra premium over local traffic, thereby offsetting low-yield connecting fares and avoiding over-dependence on low-yield transfer traffic exposed to inter-hub competition.[234] A hub needs feeder traffic, as flow traffic is the essence of a hub-and-spoke network.

Passengers may find that they have more destinations available, albeit most of them shall be through connecting and not direct flights. However, if only the hub-and-spoke system generates enough traffic to operate flights on certain thin routes, then travellers in these cities have only advantages. In other cases, where a carrier previously operated a low frequency direct flight, the hub-and-spoke network enables higher frequency. Moreover, if the passenger lives in a spoke city connected to several hub-and-spoke networks, he can enjoy the benefits from inter-hub

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T Hansson, Dr. J Ringbeck and Dr. M Franke, 'Airlines: a new operating model - providing services and coverage without the cost penalty' 3-4, available at: <http://www.boozallen.com/media/file/Airlines_NOM_Final.pdf> accessed 31 December 2012.

232 See, for example, Oum Zhang and Zhang 1995 (n 212) and Hendricks Piccione and Tan 1997 (n 212).

233 Holloway 2008 (n 187) 387-391.

234 ibid 380-386.

competition.[235] What might concern passengers is hub dominance. Nevertheless, increased prices are accompanied by wider choice and higher frequencies than it would be justified based on local demand alone.

4.5 Summary

In this Chapter 4, the legal and economic background of air transport has been reviewed. It has shown the international law aspects of air transport and the origins and reasons for the Chicago system, which builds on states' complete and exclusive sovereignty over their airspace which, to this day, determines international air transport in most parts of the world. This principle serves as a basis for bilateral ASAs. The chapter also dealt with US deregulation, a domestic phenomenon that quickly produced spill over effects for the entire international air transport industry. Europe was among the first to follow the US example. However, the EU Commission had a much harder task to accomplish. It had to undertake its plans against the will of Member States, which opposed liberalisation for a number of years. The result is rather fascinating, taking into account the fact that a fully liberalised, integrated air transport market has been created between Member States. Over the last few years, the Commission has tried to extend these benefits to additional markets through a common external aviation policy.

Finally, the chapter discussed the special characteristics of airline economics. The most important features are the cost economies arising, especially in hub-and-spoke systems. Economies of traffic density arise when unit cost declines as the traffic carried within an unchanged network rises. As the traffic volume increases, larger aircraft can be used with lower unit costs. Economies of scope arise when it is cheaper to produce two products together, rather than for each product to be produced by separate firms. In the hub-and-spoke system, traffic is channelled through one transfer point. On the outbound and inbound flights, passengers to and from different destinations use the same aircraft and several products are produced together with the effect of lowering costs.

Given these legal and economic settings, the hub-and-spoke network structure currently serves as the standard for international long-haul air transport. The logic of

[235] ibid 393.

airline alliances should be understood against this background, which is not likely to undergo rapid change for at least the next decade.

5 Strategic alliances in the airline industry

This chapter sets out strategic alliances in the airline industry. It begins by examining the developments that led to the widespread use of alliances as a corporate strategy. It will identify the motives and objectives of strategic airline alliances. Alliances can take any form that constitutes something more than a normal contract but less than a full-scale merger. This statement also applies to airline alliances and, so, the chapter will also review the different forms that an alliance can take. Particularly consideration is afforded to revenue and profit-sharing joint ventures, which create the highest possible integration within an alliance and are the subject of on-going investigation within the EU. Finally, brief consideration is afforded to the issue of durability and success. The chapter will describe strategic alliances in detail and, in doing so, seeks to contribute towards clarifying the context of alliance agreements for competition law purposes. The chapter builds on the findings of the previous chapters.

In this thesis, the question asked is whether, in the light of the more economic approach, airline alliances can be classified as object restrictions by interpreting this concept in a wider sense under Article 101(1) TFEU. By a detailed analysis of airline alliances, this thesis argues for the wider interpretation of restriction by object, and does not identify any contradiction with the more economic approach of EU competition law. The first section of Chapter 5 (section 5.1) describes the alliance phenomenon in the airline industry. It highlights the industry developments that contributed to the increasing importance of alliance strategy. Increased pressure on network airlines in domestic markets pushed them for more integrated alliances in the form of revenue-sharing alliances that eliminate all competition between partner airlines. This section also explains the background of alliance agreements and why they can be regarded as restriction by object despite their potential for creating efficiencies.

Section 5.2 explains the airline specific motivations and ideas behind the creation of airline alliances. As with Chapter 3, this analysis reveals the purpose of alliance agreements, but here the focus is specifically on airlines. Therefore the conclusions of this chapter are relevant both for the analysis under Article 101(1) TFEU and

more importantly for the scrutiny of efficiency claims under Article 101(3) TFEU. The following section 5.3 examines in detail the form of cooperation within strategic alliances. It demonstrates the extent of cooperation and the level of integration, ie elimination of competition that is possible and usually undertaken within alliances. This type of analysis is crucial for the assessment under Article 101 TFEU since not all forms of strategic alliances would be considered as a restriction by object. Certain low-level cooperations within strategic alliances would be at most only restrictions by effect depending on the circumstances.

Finally, section 5.4 considers the success and failure of airline alliances. These issues are highly relevant for the distinction between merger analysis and the approach of Article 101 TFEU. They support the view that strategic airline alliances cannot be equated with mergers. Therefore it is also legitimate to apply stricter rules in alliance assessments instead of pursuing a merger analysis within the ambit of Article 101 TFEU.

5.1 Background of alliance formation within the industry

5.1.1 Business models in the liberalised markets

Upon the emergence of US deregulation and EU liberalisation, as explored in Chapter 4, the domestic airline industries on both sides of the Atlantic began to approach 'normality'. This means that markets now operate, in theory, without unnecessary government interventions according to normal market conditions. As a consequence, not everyone makes money. Undertakings that are well-managed shall make money in good years and, as such, are less affected by bad years. The worst-managed firms, on the other hand, bear a high risk of outright failure.[1] Airlines are now more so concerned with the economics of markets and devising strategies to create 'factories that produce route density'.[2] Their aim is to offer services at competitive costs while generating above cost revenues.

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1 ME Levine, 'Airline consolidation: how will it reshape the industry? What does it mean for Europe?' (First Annual Airneth Lecture, Schipol, 11 March 2009) (Levine 2009) 3, <https://www.airneth.nl/index.php/doc_download/865-airneth-annual-lecture-by-prof-michael-e-levine-airline-consolidation-how-will-it-reshape-the-airneth-annual-lecture-by-prof-michael-e-levine-airline-consolidation-how-will-it-reshape-the.html?q=levine> accessed 31 December 2012.

2 ibid 5.

This can be achieved by either attracting high yield passengers with cost-intensive hub-and-spoke networks or by stimulating lower yield traffic and serving that traffic with a low-cost model. Incumbent airlines have now transformed into hub carriers in an attempt to maximise the cost efficiencies available to them. At the same time, low-cost airlines have emerged with the same goals as the incumbents albeit applying different methods in their efforts to achieve them. Kleymann and Seristö draw similar conclusions by identifying three generic airline strategies: *growth*, *focus* and *low-cost*.[3] *Growth* can be facilitated through organic growth or through mergers and alliances. The *focus* strategy entails some form of niche strategy based on a certain geographic market or customer base; consider the example of Virgin Atlantic until recently.[4] The *low-cost* strategy entails large volumes of customers being served at an extremely low-cost, thereby achieving a profit.

Network airlines and low-cost airlines operate within the same economic reality. They intend to operate an aircraft size that allows competitive unit costs to be realised and, having established this, they then seek to find enough passengers who are willing to pay the fares in order to cover the total costs of running its flights.[5] For the purpose of this thesis, the interaction between these two types of market player is most important, for it is this interaction which provides insights into the role of alliances. It is, therefore, the purpose of this section to provide an introduction to the differences and the interaction between these two business models.

The significance of airline alliances as a form of business strategy has grown rapidly over the last two decades due to the increased domestic competition from low-cost airlines and, additionally, the overall trend of globalisation, which saw the legacy airlines shift their focus onto international markets or, in the case of European airlines, to long-haul international markets. At the same time, consumers began to expect a 'from anywhere to everywhere' service approach from their airlines.[6] As

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3 B Kleymann and H Seristö, *Managing strategic airline alliances* (Ashgate 2004) (Kleymann and Seristö) 10.

4 ibid 12.

5 Levine 2009 (n 1) 5.

6 Transatlantic airline alliances: competitive issues and regulatory approaches, a report by the European Commission and the United States Department of Transportation (16 November 2010) (Transatlantic airline alliance report) 3.

such, airlines were forced to cater for the needs of a global market.[7]

In the 1990s, US airlines embarked upon an international expansion to increase the global reach of their domestic networks and to make use of the opportunities provided by the more liberal international regulatory systems. Alliances served as a facilitator of this process. European airlines that were prohibited from accessing the domestic US market also made use of alliances to develop their international networks. The early forms of airline alliance were loose cooperations in the form of marketing alliances that afforded more concentration to the revenue-side than to the cost-side of the operations. In the first period of post liberalised markets, traditional network airlines and low-cost airlines subsisted and developed in harmony with one another. This was the 'golden 90s' when global economic upturn boosted demand and business passengers were ready to pay high fares for flights.[8]

5.1.2 Low-cost airlines

However this period of mutually beneficial growth was brought to an end when low-cost carriers achieved a critical size as a result of fundamental changes in the early 2000s.[9] Economic downturn, rising fuel prices and industry shocks – such as the 9/11 terrorist attacks, the Iraq war or the SARS epidemic – hit network airlines especially hard and exposed their vulnerability in domestic operations as compared with low-cost airlines. As has been alluded to, only a fraction of city pairs can sustain direct flights on a daily basis. For example, in Europe approximately 75 000 origin-destination markets exist but, nevertheless, only 3% of them have more than 75 passengers per day.[10] Low-cost airlines tackle the problem of route density in a different way. While network airlines aggregate passengers through their hubs, low-cost airlines offer passengers attractively low prices to compensate them for the inconveniences they have to endure in terms of flight routes and journey time.[11] In

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7 K Iatrou, *Airline choices for the future from alliances to mergers* (Ashgate 2007) (Iatrou 2007) 1.

8 M Franke, 'Competition between network carriers and low-cost carriers – retreat battle or breakthrough to a new level of efficiency?' (2004) 10 Journal of Air Transport Management 15 (Franke 2004) 15.

9 ibid 16-17.

10 S Auerbach and W Delfmann, 'Consolidating the network carrier business model in the European airline industry' in W Delfmann, H Baum, S Auerbach and S Albers (eds), *Strategic Management in the Aviation Industry* (Ashgate 2005) (Auerbach Delfmann 2005) 67.

11 Levine 2009 (n 1) 6.

this regard, they manage to enlarge the catchment area they serve,[12] thus creating more opportunities to fill their aircraft while operating on a point-to-point basis. Low-cost airlines either fly via primary airports and stimulate extra traffic by setting prices that network airlines cannot match or, alternatively, they fly via small secondary airports at prices that passengers find attractive enough for the added trouble of getting there.

Low-cost airlines have an inherent cost advantage in short-haul operations in comparison to network airlines due to the fundamental differences of their business models. This cost gap was initially as high as 45-62%.[13] In fact, according to some commentators, more than 70% of continental traffic (US or European) could be served by low-cost airlines at a service quality level of 80% for less than 50% of the network airlines' unit cost.[14]

The cost advantage of low-cost airlines originates from a more streamlined business model: one that does not attempt to serve all potential passenger segments with a series of complex operations. Traditionally, and in the early years of liberalisation, network airlines targeted the custom of all passenger segments within their hub-and-spoke network. These passenger segments included both *high* and *low* yield intercontinental/continental connecting/point-to-point traffic.[15] The operation of complex hub-and-spoke systems came at a cost and this was initially financed by high yield business passengers. Indeed, network airlines were very much dependent on the volatile demand of high yield business passengers, which proved a significant weakness in turbulent economic times. This business model would remain

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12 ibid 8.

13 R Doganis, *The airline business in the twenty first century* (2nd edn Routledge 2006) (Doganis 2006) 176; D Lee, 'US industry outlook: presentation to Embraer' (29 May 2007) (Lee: US outlook), available at: <http://kasperlee-aviation.com/thought_leadership/Lee%20Embraer%20Presentation.pdf> accessed 31 December 2012; Franke 2004 (n 8) 17; R Macario, V Reis, J Viegas, H Meersman, F Monteiro, E Van de Voorde, T Vanelslander, P Mackenzie-Williams, H Schmidt, 'The consequences of the growing European low-cost airline sector' a study prepared for the European Parliament's Committee on transport and Tourism (4 December 2007) (Macario low-cost study) 9, available at: <http://bookshop.europa.eu/en/the-consequences-of-the-growing-european-low-cost-airline-sector-pbBA3008255/> accessed 31 December 2012; See also B Vasigh, K Fleming and T Tacker, *Introduction to air transport economics* (Ashgate Publishing 2008) (Vasigh 2008) 319-323.

14 Franke 2004 (n 8) 18.

15 ibid 16; M Franke, 'Value Creation in Small and Mid-size Airlines: How small and medium network airlines can prepare for a changed industrial framework' (CEE Aviation 2006 conference, 19 June 2006, Budapest).

sustainable so long as no subgroup of passengers were able to deflect from the coalition of all passenger groups served by the airline.[16] Low-cost airlines, on the other hand, concentrated exclusively on continental traffic on a point-to-point basis, thereby threatening the integrated production model of network airlines.[17] Although there are many variants among low-cost airlines,[18] they have in common certain operating characteristics, which create the abovementioned cost advantage.[19]

Most importantly low-cost airlines operate a simple point-to-point network without incurring the additional cost of creating and operating a hub. In actuality, they expressly discourage connections between their own flights. They concentrate, instead, on a single class passenger service without cargo operations. They either charge extra for so-called 'frill' services like catering, lounges, frequent flyer programmes, seat allocation and extra comfort or, alternatively, they choose not to offer these services at all.

Low-cost airlines mainly operate from secondary airports, meaning they can provide extremely quick turnaround times in order to minimise the non-efficient time spent on the ground. They operate fleets compiled of a single type of aircraft and employ only the minimum necessary cabin crew in an effort to reduce costs.

Labour costs are also lower due to the employment of a generally non-unionised workforce with lower salaries. Employee productivity is significantly higher in these airlines in comparison to network airlines. Low-cost airlines achieve significantly higher aircraft utilisation rates as they actively seek to maximise the time spent in the air. These airlines fly with high density seating which has the effect of increasing output. On the ground, low-cost airlines generally outsource all non-core activities like ground handling or maintenance. With regard to distribution, they rely fully on direct internet sales through their own websites and usually refrain from using

16 D Gillen and WG Morrison, 'Regulation, competition and network evolution in aviation' (2005) 11 Journal of Air Transport Management 161 (Gillen Morrison 2005) 166.

17 Auerbach Delfmann 2005 (n 10) 75.

18 See G Francis, I Humphreys, S Ison and M Aicken, 'Where next for low cost airlines? A spatial and temporal comparative study' (2006) 14 Journal of Transport Geography 83 (Francis 2006).

19 See for example Doganis 2006 (n 13) 150-170; R Doganis, *Flying off course, airline economics and marketing* (4th edn Routledge 2010) 131-155; Vasigh 2008 (n 13) 309-319; Macario low-cost study (n 13) 4-10; Francis 2006 (n 18) 84; Deutsches Zentrum für Luft- und Raumfahrt eV, 'Airline Business Models' (December 2008) 8-11 available at: <http://ec.europa.eu/transport/air/doc/abm_report_2008.pdf> accessed 31 December 2012; Gillen Morrison 2005 (n 16).

CRSs/GDSs, travel agents or any other indirect sales channels. Finally, these airlines have increasingly generated revenue from ancillary services - like hotel bookings, car rentals, excess luggage charges, on-board sales and advertising - or from payments for 'frill' services.

5.1.3 The response of network airlines

Following the rapid and large-scale expansion of low-cost airlines in the early-2000s, it became evident that - even without the external factors of 9/11, wars or economic crisis - the days of high fares were a thing of the past.[20] In Europe, the market share of low-cost airlines increased from 4.9% in 2001 to 35.3% in 2010, while the respective figures for North America were 17.6% and 28.8%.[21] Even more importantly, by the end of the decade the majority of network airlines' domestic revenues came from markets with low-cost competitors.[22] High fare demand in continental markets decreased significantly on a permanent basis.[23]

Faced with the unavoidable competition from low-cost airlines in their short-haul markets, network airlines searched for an appropriate response.[24] Initially, network airlines tried to copy their low-cost competitors by creating their own in-house low-cost subsidiaries, but with little success. Another more general initiative from network airlines has been the numerous cost-cutting programmes implemented over the last decade. Network airlines tried to converge their business model towards low-cost airlines by simplifying their products and pricing, reducing services levels where possible and by increasing productivity and aircraft utilisation.[25] They sought to decrease their cost disadvantage by 'de-peaking' their hubs and by reducing or

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20 Iatrou 2007 (n 7) 20.

21 Annual analysis of the EU air transport market 2010, final report (European Commission September 2011) 97, available at: <http://ec.europa.eu/transport/modes/air/observatory_market/doc/annual-2010.pdf> accessed 31 December 2010.

22 R Bennet, P Murphy and J Schmidt, 'International airline alliance development – necessary for network airlines and consumers' (July 2009) (Bennet Murphy 2009) 20, available at: <http://www.accc.gov.au/content/trimFile.phtml?trimFileTitle=D09+96538.pdf&trimFileFromVersionId=932218&trimFileName=D09+96538.pdf> accessed 31 December 2012.

23 ibid 17-23.

24 See for example C Klingenberg, 'The future of continental traffic program: how Lufthansa is countering competition from no-frills airlines' in W Delfmann, H Baum, S Auerbach and S Albers (eds), *Strategic Management in the Aviation Industry* (Ashgate 2005) (Klingenberg 2005).

25 ibid 176-177 and 181.

abandoning secondary hubs.[26] Network airlines put emphasis on increasing the proportion of direct channels in their ticket sales and substantially reducing travel agent commissions.[27]

However, any restructuring of hub-and-spoke systems creates the challenge of how to avoid weakening the network's competitive position relative to other networks.[28] The complex demand that network airlines tried to capture created complex networks with higher costs and, therefore, any change implemented as a response to low-cost airlines could destroy a network characteristics, which are valued so highly by other customer groups,[29] or simply cause it to fail due to insufficient cost cuts.[30] In addition, all these changes have to be implemented in an environment of declining yields, with little chance that they would be able to capture the extra demand stimulated by low-cost airlines.[31] Network airlines began to carry out extensive capacity cuts and outsourced some of their short-haul operations to lower cost regional airlines and subsidiaries.[32] Both Air France and Lufthansa began substantive restructuring in 2012 in response to the increasing competitive pressure exerted on their short-haul routes.[33]

In summary, network airlines are unable to compete profitably on short-haul markets due to the significant presence of low-cost competitors, the existing cost gap and the loss of high yield demand and, for the time being at least, there is nothing which suggests any change in that respect.[34] In 2011, the largest low-cost airline in the world was Southwest Airlines with 135 million passengers, followed by Ryanair with 76 million.[35] Low-cost airlines produce double-digit traffic increases and remain profitable, while their network airline rivals in the same markets tend to

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26 N Dennis, 'End of the free lunch? The responses of traditional European airlines to the low-cost carrier threat' (2007) 13 Journal of Air Transport Management 311 (Dennis 2007) 313; Klingenberg 2005 (n 24) 178-180.

27 Dennis 2007 (n 26) 318-319.

28 Franke 2004 (n 8) 18.

29 Gillen Morrison 2005 (n 16) 173.

30 Auerbach Delfmann 2005 (n 10) 84-86.

31 Franke 2004 (n 8) 18. For example between 2002 and 2003 low-cost airlines increased their market share from 13 to 36% in the traffic between Germany and UK. The total market increased by 3% while network airlines Lufthansa and British Midland lost 12% and the gross revenue per passenger decreased by 23% (in Klingenberg 2005 (n 24) 170).

32 Bennet Murphy 2009 (n 22) 16-17; Dennis 2007 (n 26) 312-313.

33 See 'Short selling' in Airline Weekly issue no. 385 (4 June 2012) 1 and 12.

34 ibid 17.

35 Airline Business (May 2012) 38.

downsize in an effort to minimise losses.

5.1.4 Competition in long-haul markets

However, the inherently more profitable operation of low-cost airlines in short-haul markets does not signal the endgame in the competition of these two business models of air transport. The point-to-point low-cost strategy, besides being inherently more profitable, is also inherently limited in its growth potential.[36] Upon exceeding a certain size, there exists an extremely limited number of markets available for these airlines and the potential for low-cost operations or ancillary revenues have their limits too.[37] In the pursuit of additional passengers and route density, low-cost airlines may wish to create 'quasi-hubs' where passengers self-connect; however, this would raise their costs and lower their competitive advantage.

Nevertheless, the ability of network airlines to combine passengers travelling on different city pairs provides them with an advantage in small markets or in medium and long-haul markets, where the intermediary stop at a hub is not seen as a decisive time/comfort penalty. These markets are not currently accessible to low-cost airlines, either because of the insufficient passenger numbers or due to the lack of suitable equipment for serving medium or long-haul markets on a point-to-point basis.

These hub-and-spoke operations are most efficient at a sufficiently large scale, built around a hub airport with a relatively large and financially strong local passenger base. This can be explained by the economics of air transport, in particular economies of density, and by the fact that long-haul aircraft generally have a much higher capacity than short-haul equipment. Filling aircraft like the Airbus A380 requires an extensive global network which has access to all important traffic generating areas. In Europe, for example, London, Paris and Frankfurt offer the base for such efficient networks which, in turn, also determines the number of mega-hub airlines that can survive, even with their short-haul networks being under fierce attack from low-cost airlines. Besides mega-hub airlines like British Airways/Iberia, Air France/KLM and the Lufthansa Group, only airlines with either a decisive cost

[36] Levine 2009 (n 1) 8-9.
[37] See the example of Southwest Airlines.

advantage or some niche role can survive independently in the long run.[38]

The competitiveness and efficiency of network airlines in long-haul markets can be explained with the following factors. Long-haul operations are inherently more efficient than short-haul operations given the proportion of time in which the aircraft is in the air. Aircraft utilisation is also higher due to the long distances flown and, often, the pursuance of overnight operations,[39] while the length of turnaround times does not cost that much time wise as in short-haul operations. Although the absolute costs of operating large capacity long-haul aircraft is more than in the case of single aisle aircraft, the unit cost is considerably lower. In short, long-haul aircraft are proportionally more efficient. In long-haul flights, passengers seem willing to pay for 'frills' and, even in weak economic periods, demand exists for high priced first and business class services. Long-haul services also have a much greater potential for complementary cargo operations that provide additional revenue streams to airlines.

Exactly the same reasons can explain the difficulties of extending the low-cost model to long-haul operations.[40] Most of the cost advantages of low-cost airlines seem to be difficult to transpose to long-haul operations in a way which provides the same amount of advantages. Furthermore, the limitations arising from the point-to-point nature of low-cost airlines are even more striking in long-haul markets.

The cost advantages derived from lower distribution costs are less relevant in long-haul markets since passengers, and especially premium passengers in these markets, still tend to make their purchases through travel agents. Operating from secondary airports does not bring the same level of cost savings due to the longer stage length and the lower number of landings and take offs each day. Airport costs spread to a much higher volume of output and, therefore, are proportionately lower. Part of the traffic that low-cost airlines carry is traffic they have generated with low prices. This

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38 Levine 2009 (n 1) 13-15.

39 G Francis, N Dennis, S Ison and I Humphreys, 'The transferability of the low-cost model to long-haul operations' (2007) 28 Tourism Management 391, 393.

40 ibid; See also JG Wensveen and R Leick, 'The long-haul low-cost carrier: a unique business model' (2009) 15 Journal of Air Transport Management 127 (Wensveen Leick 2009) 128; P Morell, 'Can long-haul low-cost airlines be successful?' (2008) 24 Research in Transportation Economics 61 (Morell 2008); NPS Dennis, 'The development of long-haul air services from regional and secondary airports in Europe' (paper submitted to the 45th Congress of the European Regional Science Association, Amsterdam, 23-27 August 2005) available at: <www.feweb.vu.nl/ersa2005/final_papers/316.pdf> accessed 31 December 2012.

phenomenon works in short-haul markets, albeit commentators consider it rather limited in the 'seven days or more' long-haul category.[41] Finally, the long-haul aircraft technology that is currently available favours hub-and-spoke operations by reason of the aircraft's capacity; not many markets can support point-to-point services of this scale.[42]

Despite these difficulties, experiments of entering long-haul markets with low-cost services have been numerous in recent years.[43] Nevertheless, as of today, none of these attempts has proved the sustainability of low-cost long-haul operations.[44] The long-haul low-cost business model may become more credible with the arrival of the new lower capacity long-haul aircraft like Boeing's B787 or, later, Airbus' A350 XWB. These aircraft promise to achieve significant cost improvements at lower capacity levels, thereby opening smaller routes for long-haul traffic.[45] Although the appearance of low-cost long-haul carriers would place further pressure on network airlines, due to latters' competitive networks, it is doubtful that they would cause difficulties similar to those seen in short-haul markets.

5.1.5 Summary

As has been shown above, network airlines have their advantage and strengths in long-haul global markets, which they are likely to maintain. Low-cost airlines, on the other hand, can successfully compete on short-haul markets with their point-to-point services, offering a viable alternative to hub-and-spoke networks. This is not likely to change or be reversed. Furthermore, this trend and the market circumstances that favour cost-efficient operations lead network airlines to focus on international operations, their own primary competitive advantage, and gain strength from their global networks.[46] Alliance strategy appears to offer network airlines a way to address the challenges they face domestically, especially considering the restrictive

41 Morell 2008 (n 40) 65.
42 Wensveen Leick 2009 (n 40) 130.
43 ibid 131.
44 ibid 129-130.
45 Boeing promises 20% more fuel efficiency and 10% better cash seat mile cost, see: <http://www.boeing.com/commercial/787family/programfacts.html> accessed 31 December 2012;
Airbus claims 25% operating cost savings with its A350 XWB product, see: <http://www.airbus.com/aircraftfamilies/passengeraircraft/a350xwbfamily/> accessed 31 December 2012.
46 Bennet Murphy 2009 (n 22) 24.

regulatory environment that remains in international aviation.[47] Currently the broadening and, in particular, the deepening of alliance relationships seems to be an essential part of network airlines' strategy while, in the 1990s, entering into alliances seemed to provide little more than a good opportunity for additional revenue flow. This is the environment that has incentivised alliances, especially over the last decade. In the following section, the specific motives and objectives of alliance formation is explored.

5.2 The motives and objectives of forming airline alliances

Kleymann and Seristö mention three primary objectives in airline alliance agreements: defensive objectives, market offensive objectives and efficiency seeking objectives.[48] Defensive objectives try to reduce environmental uncertainty and achieve a more stable operating environment through integration into an alliance. Offensive objectives include value enhancement, network enlargement and hub dominance.[49]

What follows is a categorisation of the explanations found in the literature according to the aforementioned classification concerning the motives and objectives of alliance formation.[50] The first category of motives and goals was 'technology and know-how'. In the context of the airline industry, the first motive that warrants mention is aircraft maintenance.[51] In the 1960s, airlines formed alliances to maintain their large wide-body aircraft at more economically viable terms. This category also includes access to knowledge of local markets or better management practices. Economies of experience refer to the added knowledge that an incumbent or local airline gained through its experience. An alliance can be motivated by this knowledge, since information can be exchanged between the alliance partners and the new partner does not need to acquire it on the market.[52] Alliances can also help to share industry-specific practices through various working groups that operate within alliances.

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47 Transatlantic airline alliance report (n 6) 3.
48 Kleymann and Seristö (n 3) 38-39.
49 ibid.
50 See section 3.1.2.
51 J Burton, P Hanlon, 'Airline alliances: cooperating to compete?' (1994) 1 Journal of Air Transport Management 209, 213.
52 N Evans, 'Collaborative strategy: an analysis of the changing world of international airline alliances' (2001) 22 Tourism Management 229 (Evans 2001) 237.

The next category is 'financial assets' which includes: risk sharing, economies of scale, faster payback on investment, sharing of R&D costs, minimising capital investment, and availability of the partners' financial resources. Economies of traffic density, scope and scale are among the most important factors to mention. Alliances, as a tool to extend networks, allow airlines to increase traffic density with passengers from an alliance partner. By connecting their networks, the carriers can generate extra traffic which, in turn, lowers unit cost.[53] With the extension of their networks, airlines can increase the quality and quantity of connecting services, allowing for large economies of scope. Airlines can also achieve economies of scale in advertising with the help of joint alliance campaigns and the establishment of a joint brand image.

Following deregulation in a more competitive, low yields environment, incumbents need to increase sales by adding flights, using larger aircraft or improving load factors to maintain revenue.[54] Alliances can serve as an ideal tool for these purposes. Although the growth rates of the air transport industry have been above average, it continues to struggle with low profit margins.[55] Alliances offer one potential means by which to increase profitability. Allying on the regional or international level with another airline, which has a lower cost base, can also result in lower costs.

The next element within financial assets was risk sharing. Entering a new route can entail considerable financial risks, which could discourage an airline from pursuing it on a standalone basis. However, an alliance cooperation, where the partners have firmly entrenched marketing strength at either end of the route, can minimise risk and make the new service viable.[56] None of the partners bears the full risk. In the globalising world economy, the airline industry is one of the most globalised, at least in terms of required services. A major market player has to be present in each of the main traffic generating geographic areas. The sheer scale of the financial resources needed for a standalone worldwide network makes the return on such an investment uncertain.[57] An alliance can break-even on an investment of this kind a great deal

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53 Iatrou 2007 (n 7) 4.

54 K Shibata, 'Motives for mega-alliance between US ex-trunk carriers and European flag carriers' (2001) 7 Journal of Air Transport Management 197, 198.

55 P Hanlon, *Global airlines, competition in a transnational industry* (3rd ed Butterworth Heinemann 2007) (Hanlon 2007) 5.

56 Evans 2001 (n 52) 236.

57 B Agusdinata and W de Klein, 'The dynamics of airline alliances' (2002) 8 Journal of Air

easier. Cooperation through alliances can deliver a worldwide network quickly, safely and at a lesser expense, offering both a seamless global service and the flexibility to adapt rapidly to any changes in the environment.[58]

Under certain circumstances, joining an alliance can also be seen as a minimisation of capital investment. In this way, member airlines can utilise the joint brand, although alliance brands currently receive less recognition than the individual airline brands. Airlines with lesser-known individual brands can also familiarise passengers with the brand by associating it with the more established global alliance brand.[59] Code-sharing can bring the same benefits by way of wider brand recognition for the local partner.[60]

The constant need for cost reductions can be satisfied with joint purchases in alliances. The potential for joint purchases were not realised for many years as, in the initial phase, alliances tended to concentrate on revenue generation and cost-cutting only features on the agenda once there has been further deepening of the alliance members' relationship. Aircraft purchases represent the most obvious example of joint purchases given that aircrafts constitute the most essential component in airline resources. There can, however, be cooperation in several other areas of procurement; such as in fuel, spare parts, catering or maintenance. Expensive long-term projects, like IT systems, can also be jointly financed by alliance partners.[61] These advantages can also motivate alliance formation.

The third category consists of 'motives related to competition'. Refraining from joining an alliance can put an airline at a disadvantage.[62] Indeed, the mere fact that a competitor has joined an alliance can motivate a carrier to enter one itself, especially if this is to avoid becoming isolated and potentially deprived of feeder traffic.[63] The case of Virgin Atlantic is often cited as a good example of an airline that, at one point or another, will have to join an alliance if it wishes to survive in the alliance-dominated transatlantic market. This point arrived in December 2012, when

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Transport Management 201 (Agusdinata 2002) 204.

58 Iatrou 2007 (n 7) 1.

59 Transatlantic airline alliance report (n 6) 8.

60 ibid 8.

61 ibid 9.

62 SC Morrish and RT Hamilton, 'Airline alliances — who benefits?' (2002) 8 Journal of Air Transport Management 402; see also Kleymann and Seristö (n 3) 77-78.

63 Transatlantic airline alliance report (n 6) 8.

SkyTeam member Delta announced that it forms a strategic alliance with Virgin Atlantic and buys Singapore Airlines' share holding in Virgin.[64] Another recurring topic is the potential entry of Gulf carriers into strategic alliances, which eventually started in 2012 with Qatar entering oneworld, Emirates joining forces with Qantas and Etihad closely cooperating with Air France/KLM. Industry professionals also often discuss the potential for loose alliances between low-cost airlines.[65] In January 2010, low-cost airlines Jetstar of Australia and AirAsia of Malaysia entered into an alliance agreement, which was the first agreement between two low-cost airlines.[66] In addition, Air Berlin - another low-cost airline - is already a full member of oneworld.

Alliances can serve as an efficient defensive tactic against new rivals or those who have recently entered the market. Competing firms can easily be neutralised after inducting them into an alliance. In oligopolistic markets, such as general air transport, a strategic alliance could create the necessary conditions to mandate competitors to refrain from ruinous competition. The other possibility is to form an alliance against the new entrants. Tactical alliances can address a specific deficiency in the airlines' network.[67] As previously described in the section on industry background, the expansion of low-cost airlines largely contributed to the more widespread use of strategic alliances and, especially, to the deeper integration of these alliances.

While rarely stated publicly as an objective, there can be little doubt that airline executives see alliances as a way of reducing or limiting competition.[68] Dominating the own hub airport can provide substantial marketing benefits for the airlines. Offering a wide range of services at an airport can secure control over local frequent flyers, corporate deals and travel agent relationships. Youssef and Hansen identify market power as a possible means in which alliances are able to limit competition.[69]

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64 See <http://news.delta.com/index.php?s=43&item=1822> accessed 31 December 2012.

65 Levine 2009 (n 1) 14-15; Transatlantic airline alliance report (n 6) 9-10.

66 Jetstar press release of 6 January 2010: Jetstar and AirAsia form world first alliance, available at: <http://www.jetstar.com/nz/en/about-us/~/_media/FBFD5FE2621E43BD981B4386DAD855CB.pdf> accessed 31 December 2012.

67 Transatlantic airline alliance report (n 6) 4.

68 Doganis 2006 (n 13) 95; Iatrou 2007 (n 7) 5.

69 W Youssef and M Hansen, 'Consequences of strategic alliances between international airlines: the case of Swissair and SAS' (1994) 28 Transportation Research Part A 415, 416.

According to this theory, liberalisation threatens the economic rent established in the years of regulation that preceded it. Incumbent airlines therefore enter into alliance agreements with third country carriers. In doing so, these incumbents can hinder the expansion of domestic route networks for others. The improved connectivity which results from this, couples with the reduced threat of entry, encourages such alliances to come into existence. Goel also reaches the same explanation.[70]

On the other hand, a strategic alliance can also be used in the opposite way. It can put pressure on the profit and market share of competitors. With the entry of KLM, Northwest and Continental to SkyTeam in 2004, the alliance gained critical mass and competitive strength in its rivalry with other global alliances.

'Market access' is the fourth category among the motives and goals of strategic alliances. Cooperation provides an easy way to gain access to markets which were previously restricted and, as such, strategic alliances can quickly enlarge an airline's network. Globalisation increases global competition and, in turn, it makes industries and markets vulnerable to changes in the economy and more dependent on foreign economies.[71] A strategy that relies on the presence of airlines in several markets, lowers the dependency on one particular market. Strategic alliances facilitate this strategy when they enhance market access. In a survey conducted among US and European airlines, it was indicated that 67% of airlines recorded 'global reach' as the prime reason for forming alliances.[72] Alliances offer a comfortable way to achieve this aim. The failed KLM/Alitalia alliance in 1999 provides another example. KLM was highly interested in the Milan area, part of the so-called 'hot banana', one of the best traffic-generating areas of Europe. Forging an alliance with Alitalia would have enabled KLM to tap into this lucrative market.

The most important barrier to entry that still exists in international aviation is the substantial ownership and effective control condition, which is found in the majority of bilateral ASAs. These restrictions are a hindrance to foreign airlines, who are not able to take full advantage of market opportunities and, thus, forces them to rely on

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70 Abhishek Goel, 'Strategic alliances in the global airline industry' (2003) 11, available at: <http://www.iimahd.ernet.in/publications/data/2003-01-02AbhishekGoel.pdf> accessed 31 December 2012.

71 Agusdinata 2002 (n 57) 202.

72 Iatrou 2007 (n 7) 3.

local partners. In other sectors of the economy, ie under normal market conditions, an undertaking interested in a particular market would simply buy a local undertaking or establish its own start-up. Either way, the undertaking would gain access to the local market.

In air transport, however, the acquisition of a local undertaking by a foreign airline potentially equates to the loss of the acquired airline's 'nationality' status; it is no longer in the substantial ownership or effective control of nationals from that country.[73] As a consequence, the acquired undertaking may lose all of its traffic rights for domestic traffic and traffic to/from third countries. For example, if the struggling American Airlines were to be bought by its alliance partner British Airways/Iberia, it would lose its status as a US carrier. It would not be entitled to carry traffic on domestic US routes and, furthermore, third countries - which have bilateral ASAs with the US - could withdraw traffic rights from American Airlines to operate between the US and these third countries. Strategic alliances help to overcome these trade barriers as the members of an alliance, retain their independence, ie their nationality. This is one of the main reasons behind the clear prevalence of airline alliances over fully-fledged mergers.

'Access to inputs, output and management experience' constitutes the fifth group of motives and goals. Access to valuable assets – which are not available internally – can justify a strategic alliance. At increasingly congested airports, scarce resources like slots or terminal facilities can inhibit access to markets. Within a strategic alliance, the coordination of activities between member airlines can enable the partner to offer such services. The pursuit of suitable slots at London Heathrow led to numerous examples in this regard. Due to extreme congestion at the airport, US airlines obtained many of their required slots from their European alliance partners.[74]

In connecting markets, a vital input can be the traffic feed from alliance partners. Joining an alliance that has a wide and well-developed hub-and-spoke network may bring additional high-yield passengers for an airline. Premium passengers prefer to

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[73] The loss of traffic rights is not an automatic process, since ASAs are more like intergovernmental trade agreements, where negotiating power can be decisive. For example see the case of Aerolinas Argentinas in Iatrou 2007 (n 7) 33.

[74] B Humphreys and P Morrell, 'The potential impact of the EU/US Open Sky agreement: what will happen at Heathrow after spring 2008' (2009) 15 Journal of Air Transport Management 72, 77.

travel with short transfers and online connections. This is partly because of convenience[75] and partly due to the wide market coverage, offering the possibility to collect and redeem frequent flyer programme (FFP) points throughout the network. An airline with a limited network and with non-coordinated connection possibilities will not appear as attractive, unless its service provides extra value for money. However, important high-yield premium passengers will probably increasingly favour the local alliance partner due to the abovementioned advantages. This increased traffic feed may ensure the viability or higher profitability of a flight through the economies associated with hub-and-spoke networks.

Alliances between global airlines and locally specialised airlines can be motivated, on the latter's part, by the need for international experience and management capabilities. Alliance membership may also provide invaluable access to the partner airline's distribution channels or its highly valued corporate customers. Particularly in long-haul markets, the role of traditional sales channels like travel agents or airline offices still play an important role. Using the local sales channels of the alliance partner can be crucial for market success.

'Complementary resources' represent the last group of motives and goals behind alliances. Although this category largely overlaps with those already mentioned, the following examples can be given. Alliances between airlines with complementary networks provide the best examples. By establishing alliances, parties combine their networks and expand the products offered. Under complementary networks, they create products of higher quality and they can increase the number of city-pairs offered, while enhancing the available connections and frequencies. Another objective in combining complementary resources is the coordination of fares and schedules for code-share services. The individual flight legs of a code share service are complementary inputs. Through the alliance, the parties can eliminate the problem of double marginalisation, internalise the effects of their pricing decisions and lower prices.

In 2004, the combination of Air France and KLM brought together their complementary maintenance capabilities. Air France has specialised in the maintenance of Airbus aircraft while KLM did the same concerning Boeing

[75] One check in, shorter travel time, delayed flights will not be cancelled, etc.

products. Given the fact that both airlines now operate a mixed fleet, these capabilities can help rationalise maintenance costs through the advantages of complementation.

In the aforementioned, it has been said that one of the most important reasons for airline alliances is to overcome the ownership rules associated with merger control while, in sequence, seeking to imitate the effects of a merger. This might suggest that without the restrictive ownership rules all alliances would be transformed into mergers. However, strategic alliances can be motivated by transactional cost reasons, which can apply even in the absence of ownership rules. Globalisation makes the economy highly competitive and volatile. This is especially true for air transport, which shows clear signs of cyclicality and closely follows the trends of the world economy. Airlines try to adopt organisational forms, which are well-suited to cope with this kind of environment. The organisational form should, therefore, be flexible, have a rapid growth potential and provide a seamless global network.[76] In certain cases, strategic alliances will be more appropriate than mergers for achieving this purpose.

Another example of transaction cost considerations is the problematic issue of pilots' and flight attendants' trade unions. In a full-scale merger, the previously independent firms - with separate trade unions and separate collective agreements - have to be merged. The transaction cost implications of renegotiating these agreements can pose a severe hindrance, even to the merger itself. In a strategic alliance, however, the issue of trade unions is of less concern given that the two firms remain independent. Consequently, strategic alliances appear more suitable as a solution.

5.3 Forms of cooperation in airline alliances

In Chapter 3, a strategic alliance is identified as a cooperation for mutual benefit and one which is intended to operate over a longer period in the pursuance of strategic aims while the partner companies remain independent. Through the contribution of assets or knowledge to the alliance, some degree of activity integration is achieved. In the airline industry, airlines can cooperate with each other in all possible areas of their operations. Individually, these cooperations do not always fulfil the conditions

[76] Agusdinata 2002 (n 57) 204.

of a strategic alliance but, as a combination, they can qualify as one. A strategic alliance can comprise of numerous variations of these more limited cooperations. Accordingly, it is not possible to put forward an exact definition as to what constitutes a strategic alliance in commercial aviation. It is a question of integration level, and the existence of strategic aims which makes the difference between a commercial and a strategic alliance.[77] The table below summarises some of the characteristics of the three existing global alliances: Star, oneworld and SkyTeam.[78]

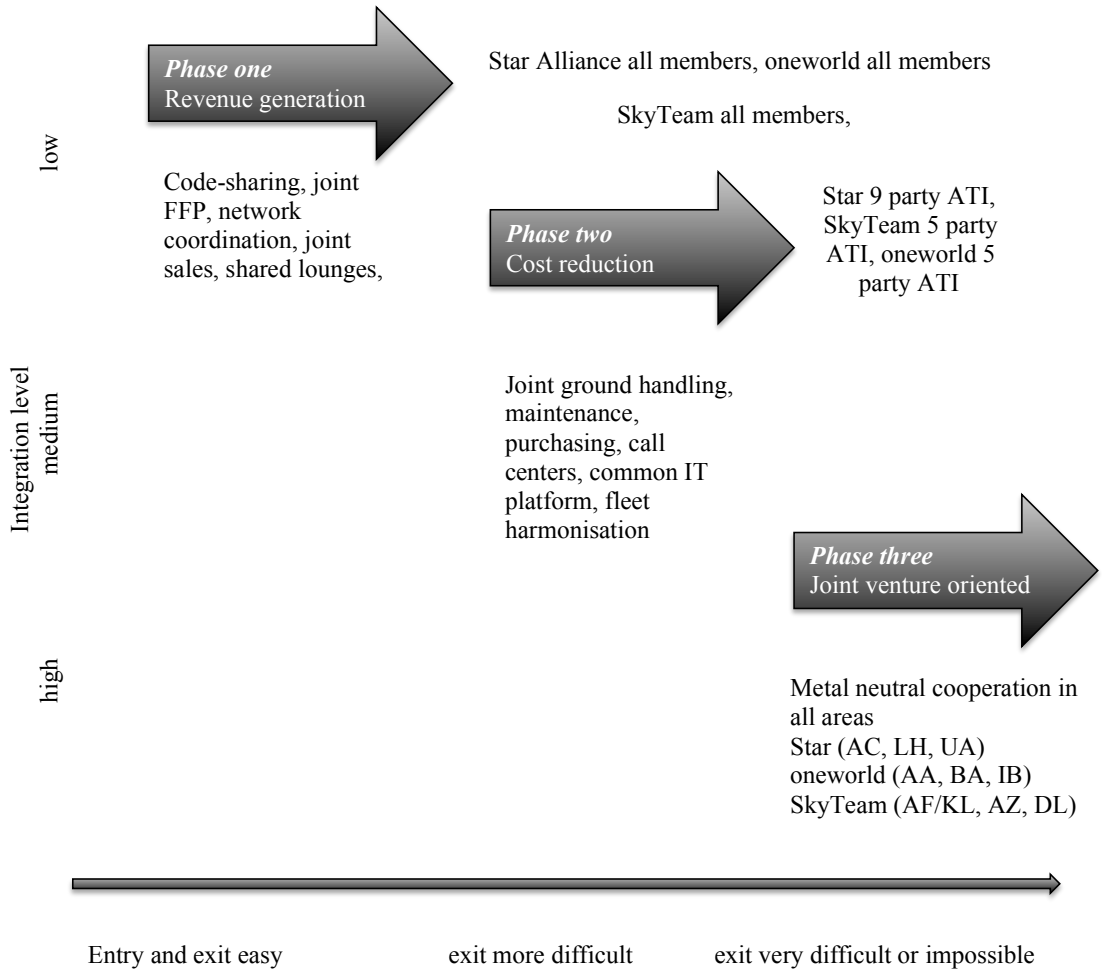

Figure 5.1 Cooperation level of alliances

As shown above, even within the same alliance there are different levels of integration and not all members participate in every form of cooperation. This can depend on the role an airline plays in the alliance or the geographic region in which

[77] Doganis 2006 (n 13) 80.
[78] Source: Doganis 2006 (modified)

it operates. In the following, the individual areas of cooperation within strategic alliances are reviewed.

The first group of cooperations can be best described by the term 'network outsourcing', which is where the airline extends its marketable network with the help of the partner through interlining, special prorate, blocked space, code-sharing or franchising agreements.[79]

Interlining and prorate: interlining is rarely treated as part of a strategic alliance. It is rather an industry practice applied by the vast majority of network airlines. Interlining is an agreement between airlines, which enables a passenger to use a single ticket to travel on more than one airline. It covers both journeys where a passenger knows in advance that he will be carried by different airlines for different segments of his trip. Two airlines agree that they can issue tickets that include flight segments operated by the other airline. The operating airline charges the issuing airline for carrying an interline passenger according to the default IATA Multilateral Interlining Traffic Agreement (MITA or multilateral prorate agreement). Besides the MITA, the two airlines must also conclude a bilateral interlining agreement to enable the application of the IATA framework.[80] Since airlines can refuse interlining with others, in certain cases interlining can be part of a cooperation. Proration, ie the division of revenue on the route between the two airlines is by default straight rate proration, which means that the revenue is split in proportion to the airlines' share of the total mileage of the trip. Mileage is weighted to take into account the different unit costs of the airlines.

Special prorate agreement: interlining agreements may be accompanied by special prorate agreements when airlines want to achieve tailor made, more advantageous conditions than the default, multilaterally determined straight rate proration methods. For example, an airline may specify a proviso for its own segment. This means that it will receive a fixed revenue whereas, under the straight rate rules, it would receive a

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79 S Holloway, *Straight and level: practical airline economics* (3rd edn Ashgate Publishing 2008) (Holloway 2008) 407.

80 Competition impact of code-share agreements, final report (January 2007) prepared by Steer Davies Gleave (code-share study) 13 available at: <http://ec.europa.eu/competition/sectors/transport/reports/airlinecodeshare.pdf> accessed 31 December 2012.

smaller amount.[81] Alliance partners often offer each other beneficial proration conditions that are not offered to non-aligned airlines.

Code-share agreement: under a code-share agreement one party (the operating carrier) operates a particular service under its own or a combined designator code, while allowing the other party (the code-sharing/marketing carrier) to sell the same service to the general public under its own or the same designator code without, however, operating the service.[82] Code-sharing involves the sharing of capacity, where one airline operates the flight and the other places its designator code on it. In principle this is an enhanced form of interlining where the airline which is not operating the flight can market the service as its own. Compared to an interlining flight, a code-share flight appears as an online, ie the airlines' own flight, which has a high appeal to consumers. Even in the lowest form of alliances, code-share agreements are among the standard form of cooperations.[83]

Code-share agreements can be classified in various ways. Based on the service which is code-shared, a distinction can be made between third, fourth, fifth and sixth freedom code-sharing.[84] Another distinction is between 'naked' and 'common product' code-sharing. The first refers to a one-off route-specific agreement without any supplemental combination of resources and services. A 'common product' code-share forms part of a wider agreement involving other aspects that improve the quality of the product, like FFP cooperation or lounge access agreements.

A third classification distinguishes between franchised, connection and parallel code-share agreements.[85] The franchisee airline operates the service under the franchisor's brand identity and designator code, while not using its own code. The connection code-sharing parties operate on connecting services, eg a short-haul service to a hub and a transatlantic service from the hub. Within this category there are two further types: non-reciprocal/single-sector code-sharing and

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81 ibid 14.

82 F Montag, 'Legal questions arising from code-sharing' (1995) European Air Law Association papers (Montag 2001) 101.

83 The Joint application of American Airlines, British Airways, Finnair, Iberia, Royal Jordanian Airlines for approval of and antitrust immunity for alliance agreements (Docket OST-2008-0252-0001) (oneworld application) says at 14 that each party will codeshare on the services operated by the other to the greatest extent possible.

84 Montag 2001 (n 82) 102.

85 Holloway 2008 (n 79) 408.

reciprocal/through code-sharing. In the case of the former, the short-haul leg of the flight carries both codes, while the long-haul leg carries only the operator's code. Under reciprocal code-sharing, both codes are placed on both legs. The flight is provided by two airlines' connecting services and they each place their code on the entire flight. Parallel code-share concerns earlier competitors. If they consolidate their services and only one remains active then it is a sole service. If they continue to operate and code-share each other's flights, it is a dual service. There is always a prorate agreement complementing the code-share agreement as the carriers have to arrange the costs and revenues of each other's passengers. The parties can also use straight rate proration, provisos or special terms as described above.

Depending on the code-share agreement's provisions on inventory control, code-share agreements can be further categorised into 'block space' or 'free flow/freesale' agreements and, within block space agreements, sub-categorised into 'hard block' or 'soft block' agreements. Block space agreements provide the non-operating/marketing airline with a determined number of seats on a particular flight of the other airline. The commercial risk associated with selling these seats is on the marketing airline's side. This means that, even if the seats remain empty those seats are deemed to have already been sold from the operating airline's point of view and, as such, the operating airline has received revenue from their sale. This can be an absolute agreement with no possibility of change afterwards (hard block) or with the option of returning certain seats if not needed (soft block).[86] The agreements might cover every available class on the flight to ensure the proper traffic mix.[87] On the other hand, in freesale or free flow agreements, the marketing airline has free access to the seat inventory of the operating airline and, as such, the each of the two airlines book seats in the same inventory.[88]

Ground handling agreements: many airlines provide ground handling services, especially at their home airports, and alliance partners can mutually provide each other with these services. Moreover, in third countries where none of the members is present, strategic alliances can jointly acquire these services, thereby lowering their operating costs.

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86 Code-share study (n 80) 11.
87 Holloway 2008 (n 79) 415.
88 Code-share study (n 80) 11.

Frequent flyer programmes: carriers can agree to coordinate their FFPs in respect of the reward structure and enable passengers to collect and redeem points in the programme of the partner airline 'with the goal of creating a consistent customer experience'.[89] A closer cooperation would be to merge the programmes. FFP cooperation is often connected to code-sharing agreements.

Cargo agreements: the parties can agree to develop cargo products jointly, use cargo facilities and terminals jointly, and cooperate on ground handling with the aim of maximising the utilisation of their route network.

Common sales and ticketing outlets: airlines can combine their sales offices all over the world, thereby avoiding duplication and increasing coverage by representing each other in certain geographic areas. The parties can consolidate administration and planning functions and can also set common sales goals. Alliance members can make joint offers for corporate customers, launch joint sales promotions and coordinate their sales activities.[90] As the oneworld application phrases it, the parties 'will jointly determine the most efficient strategies for selling alliance services, coordinating their sales forces, and allocating their sales resources'.[91]

Route and schedule coordination: with coordination the parties try to maximise the number of travelling options of optimal quality (short transfer times), allocate and use fleet, slots and terminal facilities in the most efficient way (minimise costs, delays and aircraft dead time).[92] Cooperation within an alliance may enable the members to spread their flights more evenly over the day on a particular route or to launch new services that they would not operate on a standalone basis. As the Star parties put it in their antitrust immunity application, they 'will develop a joint traffic system based on coordinated route, capacity, and schedule planning of transatlantic

89 Joint application to amend order 2007-2-16 to approve and confer antitrust immunity on certain alliance agreements (Docket OST-2008-0234-0001) (Star application) 18.

90 eg ibid 42; Joint application of Alitalia-Linee Aeree Italiane SpA, Czech Airlines, Delta Air Lines, KLM Royal Dutch Airlines, Northwest Airlines, Société Air France for approval of and antitrust immunity for alliance agreements (Docket OST-2007-28644-0001) (SkyTeam application) 31-32.

91 oneworld application (n 83) 15.

92 ibid 15.

routes'.[93]

Joint engineering: the carriers provide each other with maintenance services where possible or acquire it together from third parties.

Joint purchases: as previously mentioned, airlines increasingly turn to joint purchases to reduce costs. In the case of aircraft, this can result in significant savings. Normally airlines order aircraft with different cabin interiors, seating layout and flight kitchens in very small number. By engaging in joint purchases, airlines order with common configuration, which makes planes easier to build. A further advantage is that seasonal peaking and declines can be met with fewer problems because the transfer of airplanes between airlines causes no difficulties due to the common configuration.[94] However, joint purchases are by no means limited to aircraft. In contrast to joint aircraft purchases, which remain a rarity, alliances pursue joint procurement in many other fields. Star alliance members, for example, buy common cockpit instruments and information management systems.[95]

For example, in their alliance expansion agreement,[96] United and Asiana indicate the following areas for joint procurement: ground handling, general goods and services, field and station supplies, catering, crew uniforms, information technology products and services, aircraft and equipment, fuel and maintenance. In their antitrust immunity application, the parties to oneworld mention the following as possible areas of joint purchases: fuel purchasing, aircraft acquisition, design and purchase of replacement parts.[97] In the metal-neutral Star Alliance cooperation, the parties showed their intention to cooperate on volume/bulk purchasing agreements, joint negotiation with suppliers and establishing common specifications for the purchase of various goods and services.[98] This concerns aircraft, fuel, ground handling and maintenance services, information technology and media/advertising.[99]

IT systems: cooperation concerning IT systems includes coordination and

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93 Star application (n 89) 17.

94 D Michaels and JL Lunsford, 'Airlines Move Toward Buying Their Planes Jointly in Alliances' Wall Street Journal (20 May 2003) A3.

95 ibid 2.

96 Joint Application of United Air Lines Inc and Asiana Airlines Inc for approval of and antitrust immunity for an Alliance Expansion Agreement (Docket OST-03-14202) Article 4.7.

97 See oneworld application (n 83) 15.

98 Star application (n 89) 46.

99 See also SkyTeam application (n 90) 32.

harmonisation of information systems (inventory, yield management, reservations, ticketing, distribution, other operational systems), the joint development of new information technologies to facilitate ticketing (electronic ticketing, through check-in, electronic check-in), distribution (online networks, internet bookings), coordination of capacity and flight planning. Star members cooperate to harmonise IT and accounting systems, and in their antitrust immunity application mention the example of the existing common baggage tracing system adopted between Lufthansa and United.[100] IT cooperation can also include common information management to improve the communication between the different CRSs/GDSs that alliance partners use.[101] In Star, there were eight different reservation platforms at the beginning of their partnership.[102]

Airport facilities: the partner carriers share facilities and services at airports served by both parties. They operate joint lounges, check-in and customer service centres. These cooperations provide substantial benefits for the partners at airports, where airlines own terminals or have long-term lease contracts on it. Cooperation entitles eligible passengers of one airline to gain access to the lounge of the other airline, under the same conditions as though it were owned by their airline. Co-location of alliance partners can substantially improve connection times and comfort, providing passengers with a seamless connection experience.

The members of oneworld have combined ticket offices, check-in facilities and/or lounges at some 50 airports worldwide. [103] Recently, oneworld airlines completed a joint project at Tokyo Narita, and they are also co-located at Tokyo Haneda.[104] The biggest co-location project of the alliance so far has been the London Heathrow Terminal 5 move. Star Alliance airlines already operate under one roof at Bangkok, Beijing, Miami, Tokyo Narita, Seoul and Singapore airports.[105] SkyTeam airlines share a single location in Terminal 4 at Heathrow as well as combined airport services, including check-in desks, self-service kiosks and baggage drop-off

100 Star application (n 89) 46; see also SkyTeam application (n 90) 33.
101 Iatrou 2007 (n 7) 80-81.
102 ibid.
103 An introduction to oneworld: The alliance that revolves around you (oneworld media information) 5, available at: <http://www.oneworld.com/content/factsheet/2012-05-01%20Introduction%20to%20oneworld.pdf> accessed 31 December 2012.
104 ibid.
105 <http://www.staralliance.com/en/benefits/connect-and-transfer/> accessed 31 December 2012.

locations.[106] Terminal 4 holds SkyTeam's first exclusive premium check-in area.[107]

Harmonisation of standards: alliance members will often harmonise their respective product standards, service levels and in-flight amenities.[108] They establish and implement certain minimum criteria. They share information, technology, plans and know-how concerning in-flight services. The entry process of new airlines can sometimes last for several years before the candidate can demonstrate it has implemented the required service level and standards. Recently, for example, Garuda Indonesia's entry into SkyTeam has been delayed due to problems with its IT system.[109]

Pricing, inventory and revenue management coordination: the parties develop, coordinate and offer fare products (corporate, net, retail sale promotional fares) jointly. They integrate their pricing functions to the fullest extent possible.[110] They coordinate rebates, incentives, promotions, discounts offered to customers, the level of service fees, auxiliary services charges (excess baggage, pets) and air fares made available for holiday packages. They jointly develop and prepare bids for corporate and government accounts. Alliance members harmonise revenue management methods and procedures and jointly develop inventory management allocations. They provide each other access to their respective revenue management systems.[111] Code-sharing and joint services inevitably requires harmonisation of the individual airlines' fare classes, fare structure and pricing policies.

Joint marketing, branding, joint product development: airlines provide joint marketing by coordinating the level of commissions paid to travel agents, wholesalers, tour operators, consolidators, and by appointing common general sales agents. As aforementioned, they operate co-branded joint offices and co-locate certain facilities and staff. They pursue joint advertising for their products. Carriers can create joint logos and corporate markings as is the case with all three global

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106 <http://www.skyteam.com/en/Why-SkyTeam/Easy-Connections/> accessed 31 December 2012.
107 ibid.
108 oneworld application (n 83) 15.
109 Garuda's entry into SkyTeam to be delayed until 1Q2013: CEO (CAPA Center for Aviation 15 February 2012) available at: <http://www.centreforaviation.com/news/garudas-entry-into-skyteam-to-be-delayed-until-1q2013-ceo-141422> accessed 31 December 2012.
110 Star application (n 89) 43.
111 oneworld application (n 83) 15.

alliances. They can adopt one global positioning strategy upon which a joint brand and product portfolio may be developed. This could include interior design, decoration, cabin layout, in-flight entertainment amenities and services.

Metal-neutrality: engaging in this form of cooperation means that airlines that are party to the metal-neutral joint venture become indifferent as to which airline actually carries the customer. By sharing revenue on a metal-neutral basis, the cooperation removes each carrier's incentive to act opportunistically in ways that inure to the short-term financial benefit of one carrier and, instead, ensures that each carrier acts to the benefit of – and is compensated for its contribution to - the alliance as a whole.[112]

The US Department of Transportation defined metal-neutrality in the *SkyTeam II* and *Star Alliance* cases as follows:

'instead of competing among themselves for a greater share of revenue by trying to carry passengers on their own metal (aircraft), the participants agree to pool revenues and costs so that they become indifferent as to which carrier operates the service. Much like a single firm, the 4-way JV establishes a common bottom line where, [...] each participant shares the same incentive to maximize the profits of the venture.'[113]

'[...] a commercial environment in which joint venture partners share common economic incentives to promote the success of the alliance over their individual corporate interests. By pooling resources to improve the overall service offering, and by sharing gains and losses, the partners are able to harmonise the global network and become indifferent as to which of them collects the revenue and operates the aircraft on a given itinerary. They are then able to focus on gaining the customer's business by providing the best available fare and routing between two cities.'[114]

Metal-neutrality is the closest form of cooperation between airlines. It tries to imitate the effects of mergers. In the cases of Star Alliance and oneworld it involves revenue-sharing, while in the case of SkyTeam it is a profit-sharing cooperation. Metal-neutrality is supported by further cooperation in FFPs, revenue management

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112 ibid 11.
113 Show Cause Order 2008-4-17 (Docket OST-2007-28644-0174) (*SkyTeam II*) 3.
114 Show Cause Order 2009-4-5 (Docket OST-2008-0234-0193) (*Star Alliance*) 4.

and joint planning and sales. In essence, all cooperations within the alliance aim to achieve the complete alignment of incentives, ie the creation of metal-neutrality.[115]

5.4 Success and failure of airline alliances, lasting/non-lasting alliances

We have explored the motives, goals and possible forms of airline alliances. Before proceeding to examine the effects they produce, their potential outcome warrants some attention. In the following, an examination is conducted into whether there are any factors that influence the stability and long-lasting nature of an alliance. Understanding these factors is also essential for understanding strategic alliances for competition law purposes.

There have been numerous failures of strategic airline alliances and break ups of alliance relations. Swissair-led Qualiflier stands out as the most prominent example but the failed marriage of KLM/Alitalia in the form of a joint venture in 1999 might also be mentioned. In addition, British Airways had a stake of 24.9% in USAir from 1993 but later sold it to establish a relationship with American Airlines. Recently in 2007, Aer Lingus which had been a oneworld member, left the alliance after revising its corporate strategy. In 2008, Continental left SkyTeam to join Star Alliance and later merged with United. Currently, both LAN and TAM are considering the option of leaving their respective alliances (oneworld and Star) following their merger, in order to choose only one alliance for the new merged entity. Therefore, the question arises as to what determines the outcome.

Doganis identifies three phases of alliance building.[116] In the first phase, the partner airlines are concerned only with additional revenue generation and they retain their independence and corporate identity. They apply simple code share agreements, joint FFPs and coordinate their schedules. Airlines can easily terminate such an agreement as they are only commercial in nature. In the second phase, the parties deepen their cooperation and add elements of cost reductions. Here, it is evident that the parties need more coordination and trust as they have to align many of their needs. For

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115 oneworld's application refers to the following areas of cooperation: code-sharing, pricing, yield management, schedules, marketing and product offering, FFPs, sales, airports, cargo, cost reduction. See oneworld application (n 83) 14-15.

116 Doganis 2006 (n 13) 101-103.

example, in the case of joint aircraft purchases this means that they have to agree on cabin layout, interior decoration or various pieces of in-flight equipment. The interdependence created in this way makes exit more costly and, thus, more difficult for an airline; but the higher gains from joining a new grouping can convince airlines to change. A good example is the case of Austrian Airlines which ended its long-term relationship with Swissair in order to enter the Lufthansa-led Star Alliance.

In the third phase, the parties move towards the complete integration of their operations by engaging in joint ventures, like those currently existing between the core members of all global alliances. This involves metal-neutral cooperation in all areas of operation. In essence, airlines attempt to mimic the effects of a merger. Under these conditions, separation seems to be less of a realistic option, even though it remains objectively apparent that two separate firms still exist. Perhaps the main instance where separation becomes foreseeable is where a joint venture member is bought by a non-member airline. A similar approach is presented graphically below but, in this example, the particular agreement types each form a separate level of integration and not just three phases.[117]

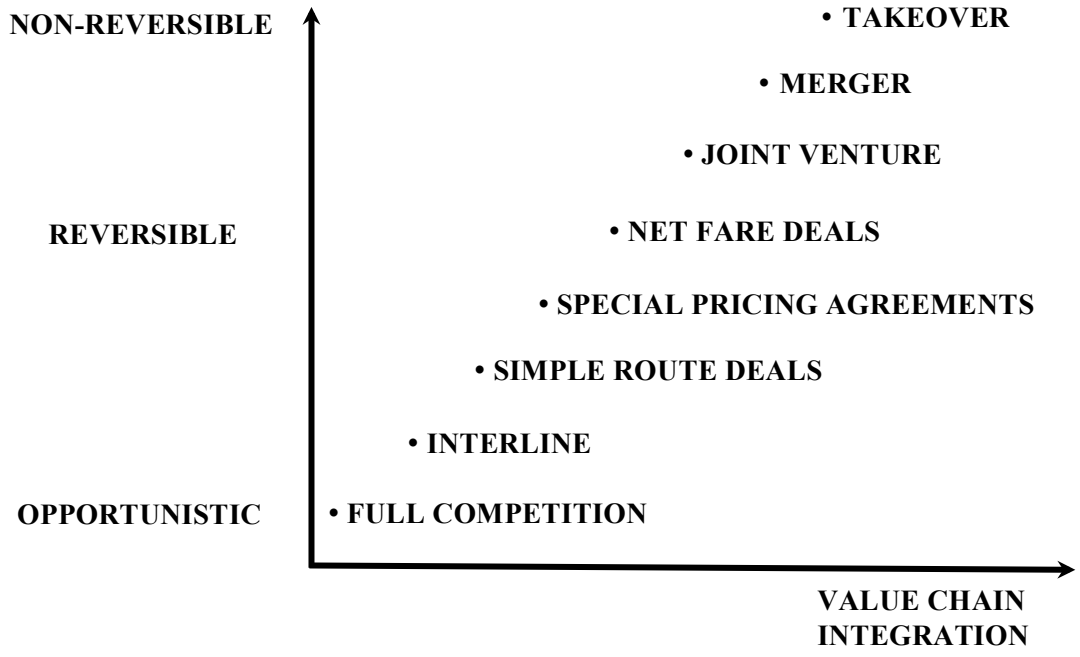

Figure 5.2 Integration level of alliances

[117] Based on the presentation 'Alliances & managing customer value' of B Kreiken, SVP KLM (Erasmus University Rotterdam, 19 February 2004).

It seems that the phase of alliance integration can be important for the success and durability of the cooperation. If the partner airlines are, for whatever reason, stuck in the early phases of alliance development, their partnership is vulnerable. Delta, Swissair and Singapore Airlines were among the first to form an alliance at the end of the 1980s but still after ten years they had not progressed further than the simple cooperations associated with the first phase.[118] When Lufthansa courted Singapore Airlines by promising something more, Singapore Airlines keenly sought to leave its partners at the time. Delta acted in the same way after an approach from Air France. In the more recent Continental switch from SkyTeam to Star Alliance, a decisive element was Continental's dissatisfaction over its position in SkyTeam and its lack of involvement in the metal-neutral cooperation of SkyTeam.

Partners should move along the integration process and carefully implement the particular phases. The example of KLM and Alitalia shows that bypassing the first two phases might result in undesirable effects.[119] Success and durability needs the following conditions. Partners should have preferably some kind of symmetry concerning power and control over assets, size and received benefits.[120] From the British Airways USAir alliance, British Airways derived much larger benefits, which created conflicts. The parties should have an agreed set of common objectives. Conflicting aims within an alliance is likely to diminish success. Airlines should pay attention to the background of their partners. Differing product and service standards, coupled with distinct cultural and management styles, may cause significant problems.

The Boston Consulting Group identifies four reasons why airline alliances failed to further consolidate the industry.[121] Asymmetric benefits, irreversible commitments, eroding option value and cumbersome decision-making might well be the reasons for the failure of alliances. In the alliances of big and small airlines with diverse backgrounds, nothing ensures that the benefits will be spread equally between the partners nor in proportion to the size of the investments and commitments made. The irreversible commitments necessary for the success of the alliance are regarded as

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118 Doganis 2006 (n 13) 100.
119 ibid 88.
120 ibid.
121 K Cools and A Roos, 'The role of alliances in corporate strategy' (The Boston Consulting Group 2005) (BCG report) 19.

undermining one of the key principles of alliances, namely flexibility.[122] Given the cooperative nature of alliances, decision-making is more difficult than in a hierarchical structure and partners often participate with their own interests in the decision.

Iatrou identifies the following factors that influence the success of an alliance: business fit, development strategy, governance and organisation, cultural fit, trust and regulatory scenario relationships with unions.[123] The most important aspect of business fit is the compatibility of the partners' networks. Development strategy refers to a shared vision of a common future.[124] When Aer Lingus decided to change its strategic positioning from a network airline to a point-to-point low-cost airline, it also meant that Aer Lingus lost its interest of being a oneworld member. Governance, cultural fit, trust and regulatory scenario do not require a detailed explanation. Relationships with trade unions are vital in the airline industry due to the power unions have over the operations of airlines.

Bissessur and Alamdari divide the factors affecting an airline alliance's success into three groups.[125] The first is network related factors which includes effective network size, network complementary, partner hub separation and network integration. Service-related factors encompass fares, travel convenience and the degree of seamlessness. The third group concerns competition and includes interline agreements and competing alliances.

According to Rhodes and Lush, the higher the commitment of resources, the greater the stability and duration of the alliance. Increased complexity on the other decreases stability. These two characteristics result in contradictory pressures on alliances.[126] Code-sharing will be the most stable alliance as both commitment and complexity is low under these conditions. The most durable alliance is characterised by a high level of commitment accompanied with minimal complexity. Alliances with low commitment and high complexity are the most likely to fail under this logic.

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122 ibid.

123 Iatrou 2007 (n 7) 169.

124 ibid 172.

125 A Bissessur and F Alamdari, 'Factors affecting the operational success of strategic airline Alliances' (1998) 25 Transportation 331, 341.

126 DL Rhoades and H Lush, 'A typology of strategic alliances in the airline industry: Propositions for stability and duration' (1997) 3 Journal of Air transport Management 109, 113.

The question with regard to the durability of alliances inevitably raises the issue of whether they will be replaced by full-scale mergers in the absence of regulatory restrictions. Although it is often stated that this would certainly occur, research implies different results. Iatrou found that, although airlines agree that mergers will take place between airlines and consolidation is gaining momentum, the majority still view alliances as a phenomenon which is here to stay.[127] It seems that alliances and mergers will co-exist and continue to form part of airline strategy into the future. According to Iatrou, 65% mention that mergers are a choice for airlines and not a necessity.[128] In fact, only 6% thought that mergers were more important than alliances.[129] Mergers are most likely to take place on a regional basis, as shown by the numerous takeovers of Lufthansa in Europe. However, due to reasons other than those relating merely to regulatory restrictions, alliances also remain an important tool in the strategy of airlines.

5.5 Summary

This chapter has sought to present the industry-specific background of alliance formation and the airline-specific motives of entering strategic alliances. Competition on liberalised markets has the effect of constantly decreasing yields. With the widespread operations of low-cost airlines, the only way to sustain revenue is by extending international operations and improving load factors. The threat of low-cost traffic on short-haul markets has forced network airlines towards international cooperation. The most appropriate course of network extension is strategic alliance formation. The most important motives for the formation of an airline alliance are the need to overcome the ownership rules and the advantage of achieving economies of traffic density, scope and scale.

Strategic airline alliances can take a number of forms but usually involve the combination of collaborations in certain areas. The primary element of every alliance is code-sharing and FFP agreements. Not every inter-airline cooperation reaches the level of a strategic alliance; a lot of them belong to the category of commercial alliances. The pursuit of strategic aims and the combination of assets for this purpose

127 Iatrou 2007 (n 7) 194.
128 ibid 195.
129 ibid.

makes all the difference. Cooperation within alliances can have varying intensity, starting from loose regional cooperation and the use of standard agreements to metal-neutral revenue or profit-sharing agreements.

The final part of this chapter examined the stability and durability of airline alliances. The level of integration, commitment and complexity can be decisive in this regard. Simple commercial alliances can be vulnerable while an extensive cooperation covering all aspects of airline operations can cement the alliance.

6 EU competition law analysis of airline alliances

This chapter is dedicated to the analysis of airline alliance cases under EU competition law which constitutes the main part of the thesis and provides an answer to the thesis question by using the conclusions of the preceding chapters. In this thesis, the question asked is whether, in the light of the more economic approach, it is correct to classify airline alliances as restriction by object and interpret latter concept in a wider sense under Article 101(1) TFEU. By relying on the example and analysis of airline alliances and in particular metal-neutral alliances, the thesis argues that the wider interpretation of restriction of competition by object is correct and, as such, does not conflict with the more economic approach of EU competition law. However, the analysis of restriction by object must take into account the effects of Article 101 TFEU as a whole including Article 101(3) TFEU. Therefore this wider interpretation of object restrictions must be complemented by a realistic application of Article 101(3) TFEU, in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs.

Chapter 6 begins with the issues of market definition that establish the framework for assessing both competitive harm under Article 101(1) TFEU and potential efficiency benefits under Article 101(3) TFEU by defining the relevant competitive constraints (Section 6.1). The section also discusses the experience of both the antitrust and merger cases in the aviation industry.

Section 6.2 explores the various aspects of Article 101 TFEU's application to airline alliances. Section 6.2.3 on restriction of competition sets out the theoretical aspects in relation to restrictions by object under Article 101(1) TFEU, the more economic approach and the issue of administrability, as well as the relationship between these concepts. Although the arguments in this section do not focus on aviation, a full understanding of these issues is necessary to be able to answer the thesis question. This discussion starts by explaining the meaning and case law of restriction of competition followed by an overview of the relevant literature in particular on restriction by object. It explains the basics of restriction by object. Section 6.2.3.1 defines the more economic approach and its effects on EU competition law. Section 6.2.3.2 on administrability of efficient antitrust enforcement systems explains how the more economic approach claims to contribute to the overall efficiency of

competition law regimes and the goal of minimising error cost at affordable expense. It sets out the administrative errors that can arise from the inefficient design and application of competition rules, followed by a short overview of an ideal system. Section 6.2.3.2.1 presents the answers of US antitrust law for the challenge of minimising administrative errors by setting out the development of the per se versus rule of reason distinction. Although the US experience has limited direct relevance for the application of EU competition rules, it provides an excellent illustration of the most important factors and their interaction with regard to administrability.

Section 6.2.3.2.2 on EU aspects analyses the structure and application of Article 101 TFEU in light of the general ideas on administrability and the rich US experience. This helps to identify and emphasise the peculiarities of Article 101 TFEU. It is suggested that the bifurcated nature of Article 101 TFEU and the dichotomy of object and effect satisfies the needs of an efficient and sufficiently flexible system saving administrative resources if appropriate. It is argued that the categorisation as restriction by object only serves the purpose of shifting the burden of proof in certain cases but does not determine the outcome of the process. Therefore even the wider definition of restriction by object would be appropriate without negative repercussions on the efficiency of the enforcement system in the form of false positives.

Sections 6.2.4 to 6.2.7 explain why the theoretical conclusions discussed above would be operable also in practice as demonstrated by the example of revenue-sharing airline alliances. Section 6.2.4 uses the findings of Chapters 3 to 5 to set the framework for analysing airline alliances. It deals separately with the negative effects or possible theories of harm with regard to airline alliances and explains hub dominance and horizontal, vertical effects and multimarket contact issues. It also sets out the benefits of airline alliances, in particular the relevant supply-side and demand-side benefits. These sections demonstrate that revenue-sharing airline alliances may represent both a threat to competition and also a significant potential for efficiencies. The former legitimises the classification as restriction by object, while latter justifies the need to have a more realistic application of Article 101(3) TFEU. Section 6.2.5 explains why Article 101 TFEU is relevant for the assessment of airline alliances and why their examination should not take the form of a ‘quasi’

merger analysis within the framework of Article 101 TFEU. Section 6.2.6 concludes the whole analysis of Article 101(1) TFEU by synthesising the conclusions of preceding parts of the thesis on why the concept of restriction by object seems appropriate for the case of revenue-sharing alliances. Section 6.2.7 of the thesis synthesises the conclusions relevant for the more realistic application of Article 101(3) TFEU.

As a result, this chapter answers the thesis question by providing that metal-neutral revenue-sharing airline alliances should be classified as object restrictions which serves the more economic approach and contributes to minimising error costs at reasonable expense. At the same time this analysis must be complemented by a realistic application of Article 101(3) TFEU, in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs.

6.1 Market definition in air transport cases

In one of its early cases, the Court of Justice of the European Union (Court of Justice) states that 'the definition of the relevant market is of essential significance, for the possibilities of competition can only be judged in relation to those characteristics of the products in question by virtue of which those products are particularly apt to satisfy an inelastic need and are only to a limited extent interchangeable with other products'.[1] For the purposes of EU competition law analysis, the EU Commission's 1997 notice on the definition of relevant market is of particular importance.[2] Market definition is a tool to identify and define the boundaries of competition between undertakings. This process identifies the competitive constraints that the undertakings concerned are faced with.[3] The notice defines demand substitutability, supply substitutability and potential competition as the main sources of competitive constraints.[4] The main disciplinary force, according to the Commission's practice, is demand substitution, which exerts a more immediate and effective constraint on undertakings than the other sources of

1 Case 6/72 *Europemballage Corp and Continental Can Co Inc v Commission* [1979] ECR 461 para 32.

2 Commission notice on the definition of relevant market for the purposes of [EU] competition law [1997] OJ C372/5 (market definition notice). The methods and principles of the notice were confirmed by Union Courts on several occasions. See eg case T-446/05 *Amann & Söhne and Cousin Filterie v Commission* [2010] ECR II-01255 para 59.

3 market definition notice (n 2) para 2.

4 ibid para 13.

competition.

Defining the relevant market seeks to restrict attention only to those products and services which have a significant impact on competition.[5] The relevant market is usually comprised of two dimensions, a product-specific and a geographic dimension. However, as an air transport service inherently involves a geographic dimension, it is less useful to draw a clear dividing line between the product and geographic dimensions of air transport.[6] The definition of a relevant market forms an integral part of the competitive assessment of certain types of market behaviour. That said, the product and geographic markets merely represent separate dimensions to a single relevant market. Consequently, if these dimensions cannot be distinguished clearly, this does not necessarily mean the analysis is flawed.

Passengers rarely fly for the pure pleasure of air transport; rather, they want to get from A to B. In other words, when passengers book flights to a desired destination, the flights themselves are an intermediate product. Under this interpretation, the product demanded could be defined as the transportation from A to B, rather than flying for the sake of flying. This product definition inevitably involves a geographic element and, consequently, determining a geographic market would seem to be somewhat superfluous. This approach is called the origin and destination, in short 'the O&D approach'. Demand substitution exists whenever an increase in the price of a product causes consumers to switch from the purchase of that product to an alternative (substitute) product. Supply-side substitution occurs when, in response to a price increase, other suppliers enter the market by switching their production to offering the product in question.

In air transport, the issues of market definition can vary on a case-by-case basis. It has to be assessed whether city pairs (eg London-New York) or airport pairs (eg London Heathrow-New York JFK) should constitute the relevant market or, alternatively, whether undertakings compete on a wider market of several cities (eg Vienna/Bratislava-Manchester/Liverpool). The competitive constraints exerted by

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5 S Bishop and M Walker, *The economics of EC competition law: concepts, application and measurement* (3rd edn Sweet & Maxwell 2010) 108.

6 Mergers and alliances in civil aviation – an overview of the current enforcement practices of the ECA concerning market definition, competition assessment and remedies (Report of the ECA Air Traffic Working Group 2004) (ECA 2004) para 7, available at: <ec.europa.eu/competition/publications/eca/report.pdf> accessed 31 December 2012.

other modes of transport can be decisive on short-haul routes where high-speed train connections exists. Certain cases raise the issue as to whether one-stop/connecting services compete with non-stop/direct services, or whether the market can be further divided according to different customer groups like time-sensitive/non-time sensitive (price sensitive) or premium/non-premium consumers. The answers always depend on the circumstances of a particular case.

Nevertheless, the crucial question that always needs to be asked is the following: does the price increase of a transport service induce a sufficient number of buyers to switch to other services, so as to render the price increase unprofitable? In other words, can marginal consumers affect prices: are there enough consumers who, if they were switch to other services, could push pricing to competitive levels?[7] If the answer is affirmative, then the service which the consumers switch to should also be included within the definition of the relevant market. It is important to note that in order to make a price increase unprofitable it is not necessary that all consumers switch. It might well be the case that a small decrease in output can offset higher prices. It might also be that services with different characteristics or prices are seen as substitutes in the eyes of consumers, while other similar services are not. What is decisive is how consumers actually react in the event of a price increase.[8]

To sum up, this chapter will give some indications and examples from earlier cases to highlight the relevant factors to be considered when determining the relevant market in aviation cases.

6.1.1 Origin & destination approach

The *Ahmed Saeed* case was the first that dealt with market definition concerning scheduled air transport in EU competition law.[9] Here, the Court of Justice adopted a test which sought to determine whether a scheduled flight on a particular route can be distinguished from alternatives, like charter flights, railways and road transport

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7 P Crocioni,'Defining airline markets: a comparison of the U.S. and EU experience' (2000) 45 Antitrust Bulletin 1 (Crocioni 2000) 18.

8 The role of market definition in monopoly and dominance inquires, Economic Discussion Paper 2 - A report for the Office of Fair Trading by National Economic Research Associates, (July 2001) (OFT dominance) 8, available at: <http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft342.pdf> accessed 31 December 2012.

9 Case 66/86 *Ahmed Saeed Flugreisen* [1989] ECR 803 (*Ahmed Saeed*).

'by virtue of specific characteristics'.[10] The Court of Justice states that the test can result in different outcomes depending on the case. The analysis may conclude that there exists an airline route where no effective competition is likely to arise but in principle, within the EU, air transport on O&D city pairs or several substitutable O&D pairs can be defined as the relevant market.[11] This O&D or route-specific approach focuses on demand-side substitution, ie the consumers' point of view. Somebody with the intention to travel from A to B, will not seriously consider flying from A to D as an alternative, since he needs to get from A to B. Each route constitutes a separate market. This approach, applied from the early years of the Commission's practice, is not surprising. In the market definition notice, demand substitution is identified as the main source of competitive constraint, and the consumer's viewpoint is deemed the most important.[12] The O&D approach was confirmed in several subsequent court cases.[13]

In *Delta Air Lines/Pan Am*, the Commission suggests that the market definition could amount to each route being treated as a distinct market.[14] Depending on the demand-side substitutability of certain routes, a bundle of routes might collectively be defined as the relevant market. The Commission's approach can be seen in more detail from the *Air France/Sabena* case.[15] First it reinforces the premise that, in the air transport sector, the relevant market may be defined as the scheduled air transport of passengers on a particular route or bundle of routes connecting two geographical areas. The decision goes on to explain that substitution can be established based on the particular length of the routes, the distance between airports serving those routes, or the number of frequencies available on those routes. Subsequent cases apply this test.[16]

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10 ibid paras 39-40.

11 ibid para 41.

12 *SAS/Maersk Air and Sun-Air v SAS and Maersk* (Case COMP.D.2. 37.444 and COMP.D.2 37.386) Commission Decision 2001/716/EC [2001] OJ L265/15 (*SAS/Maersk*) para 27.

13 Case T-2/93 *Air France v Commission* [1994] ECR II-323 para 84; Case T-177/04 *easyJet v Commission* [2006] ECR II-1913 para 56; case T-342/07 *Ryanair Holdings plc v Commission* [2010] ECR II-3457 para 102.

14 *Delta Air Lines/Pan Am* (Case IV/M.130) [1991] OJ C289/14 para 12.

15 *Air France/Sabena* (Case IV/M.157) [1992] OJ C272/5 (*AF/Sabena*) para 25.

16 *British Airways/TAT* (Case IV/M.259) [1992] OJ C326/16 (*BA/TAT*) para 19; *British Airways/Dan Air* (Case IV/M.278) [1993] OJ C63/5 (*BA/Dan Air*) para 10; *Swissair/Sabena* (Case IV/M.616) [1995] OJ C200/10 (*Swissair/Sabena*) paras 18-19; *LH/SAS* (Case COMP IV/35.545) Commission Decision 96/180/EC [1996] OJ L54/28 (*LH/SAS*) para 34; *British Airways/Air Liberté* (Case IV/M.857) [1997] OJ C149/25 (*BA/Air Liberté*) para 14; *KLM/Air*

In *KLM/Alitalia*, the Commission rephrases its O&D approach.[17] Although it takes notice of the developments on the supply side of the air transport market, the emphasis still remains on the demand-side perspective and the route-specific needs of the consumer. The relevant market, therefore, includes a route or a bundle of routes on the city pair comprising:[18]

- 'the direct flights between the two airports concerned;
- the direct flights between airports whose respective catchment areas significantly overlap with the catchment area of the airports concerned at each end;
- the indirect flights between the airports concerned to the extent that these indirect flights are substitutable to the direct flights. Substitutability of direct routes with indirect routes depends on a number of factors such as the flight time or the frequencies (and schedules) of the routes'.

The latter definition in *KLM/Alitalia* set the new standard for subsequent cases.[19] The Commission has not departed from the O&D approach so far, although the parties in various cases have increasingly raised the issue of supply-side substitution and network competition.[20] On the other hand, the supply-side aspects of air

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UK (Case IV/M.967) [1997] OJ C372/20 (*KLM/Air UK*) para 19; *SAir Group/LTU* (Case IV/M.1354) [1998] (*SAir/LTU*) para 15; *SAir/AOM* (Case IV/M.1494) [1999] OJ C245/29 (*SAir/AOM*) para 14; *SAir/SAA* (Case COMP/M.1626) [2001] OJ C251/3 (*SAir/SAA*) para 10; *Singapore Airlines/Virgin Atlantic* (Case COMP/M.1855) [2002] OJ C110/8 (*SIA/Virgin*) para 16; *AOM/Air Liberté/Air Littoral* (Case COMP/M.2008) [2000] OJ C238/9 (*AOM/AL/AL*) paras 14-15; *United Airlines/US Airways* (Case COMP/M.2041) [2001] (*UA/US*) para 9; *SAS/Spanair* (Case COMP/M.2672) [2002] OJ C93/7 (*SAS/Spanair*) para 10.

17 *KLM/Alitalia* (Case COMP/JV.19) [2000] OJ C96/5 (*KLM/Alitalia*).

18 ibid para 22.

19 *UA/US* (n 16) para 10; *AuA/LH* (Case COMP/37.730) Commission Decision 2002/746/EC [2002] OJ L242/25 (*AuA/LH*) para 46; *SAS/Spanair* (n 16) para 11; *British Airways/SN Brussels Airlines* (Case COMP/A.38.477/D2) [2003] (*BA/SN*) para 8; *British Airways/Iberia/GB Airways* (Case COMP/D2/38.479) [2003] (*BA/IB/GB*) para 12; *Air France/KLM* (Case COMP/M.3280) [2004] OJ C60/5 (*AF/KLM*) para 9; *Air France/Alitalia* (Case COMP/38.284/D2) Commission Decision 2004/841/EC [2004] OJ L362/17 (*AF/Alitalia*) para 39.

20 *Lufthansa/Swiss* (Case COMP/M.3770) [2005] OJ C204/3 (*LH/Swiss*) paras 12-14; *Lufthansa/Eurowings* (Case COMP/M.3940) [2006] OJ C18/22 (*LH/Eurowings*) paras 10-11; *Ryanair/Aer Lingus* (Case COMP/M.4439) [2008] OJ C47/9 (*Ryanair/Aer Lingus*) paras 54-66; *Delta Air Lines/Northwest Airlines* (Case COMP/M.5181) [2008] OJ C281/3 (*DL/NW*) paras 8-11; *Iberia/Vueling/Clickair* (Case COMP/M.5364) [2009] OJ C72/23 (*IB/Vueling*) paras 30-31; *Lufthansa/SN Airholding* (Case COMP/M.5335) [2009] OJ C295/11 (*LH/SN*) paras 12-14; *Lufthansa/bmi* (Case COMP/M.5403) [2009] OJ C158/1 (*LH/bmi*) paras 8-10; *Lufthansa/Austrian Airlines* (Case COMP/M.5440) [2010] OJ C16/11 (*LH/AuA*) paras 11-14; *Iberia/British Airways* (Case COMP/M.5747) [2010] OJ C241/1 (*IB/BA*) paras 9-10;

transport and its network effects are taken into account, to a certain extent, when airport substitution or the substitutability of one-stop and non-stop services is examined.

Other jurisdictions also routinely use the O&D approach. As the EU Member States explain in their report on airline alliances, the O&D approach is a suitable starting point for the competition analysis of air transport cases.[21] In the 1999 OECD Roundtable on Airline Mergers and Alliances, the majority of contributing countries confirmed that they apply the O&D approach.[22] The US Department of Justice (DOJ) also adopts O&D as its preferred approach. It considers the same demand-side aspects of air transport as the EU Commission.[23] In the DOJ's opinion, to Department of Transportation (DOT) in latter's Star Alliance and oneworld investigations, the DOJ clearly argues for relevant markets no wider than city pairs.[24]

6.1.1.1 Network market definition

Network airlines operate hub-and-spoke networks or, if they do not have the sufficient size to do so, they form part of such networks within the scope of a strategic alliance. Strategic alliances play a prominent role in the creation of truly global networks. Currently, only three global airline alliances exist: Star Alliance, oneworld and SkyTeam. These alliances aim to create worldwide networks. Many argue that competition in the aviation industry should be understood and assessed as

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Olympic/Aegean Airlines (Case COMP/M.5830) [2012] OJ C195/11 (*Olympic/Aegean*) paras 41-44; *United Air Lines/Continental Airlines* (Case COMP/M.5889) [2010] OJ C225/1 (*UA/CO*) paras 9-12; *BA/AA/IB* (Case COMP/39.596) [2010] OJ C278/14 (*BA/AA/IB*) paras 17-19; *IAG/bmi* (Case COMP/M.6447) [2012] OJ C161/2 (*IAG/bmi*) paras 31-34; see also the market test notice in Star Alliance, case *AC/CO/LH/UA* (Case COMP/39.595) [2012] OJ C396/21 (*AC/CO/LH/UA*) para 5.

21 ECA 2004 (n 6) para 12.

22 1999 OECD Roundtable on Airline Mergers and Alliances DAFFE/CLP(2000)1, (OECD 1999).

23 For an overview of the DOJ's approach to the airline industry see: JB McDonald, 'Antitrust for airlines' (Regional Airline Association President's Council Meeting, 3 November 2005), available at: <http://www.justice.gov/atr/public/speeches/217987.htm> accessed 31 December 2012; JJ O'Connell, 'Impact of consolidation on the aviation industry, with a focus on the proposed merger between Delta Air Lines and Northwest Airlines' (Subcommittee on Aviation, Committee on Transportation and Infrastructure, U.S. House of Representatives, Washington D.C., 14 May 2008), available at: <republicans.transportation.house.gov/Media/File/Testimony/Aviation/05-14-08-OConnell.pdf> accessed 31 December 2012.

24 Comments of the Department of Justice on the Show Cause Order (26 June 2009) (DOJ Star) 17, available at: <http://www.justice.gov/atr/public/comments/247556.htm> accessed 31 December 2012.
Comments of the Department of Justice (21 December 2009) (DOJ oneworld) 9, available at: <http://www.justice.gov/atr/public/comments/253575.htm> accessed 31 December 2012.

competition between these global networks. Accordingly, competition analysis should also concentrate on the competitive effects of agreements or transactions on competition between these networks. Investigations limited to narrowly-defined routes or O&D city pairs cannot capture the true nature of this competition between networks, nor enable a proper assessment of the efficiencies to consumers brought about by these networks.[25] The main concern of any investigation, therefore, should be network competition on a regional level or the effects on competitive conditions of air transport between regions or continents.

However, according to the Commission, the demand for air transport services is always route-specific. If somebody is faced with monopoly prices on the route in which he/she flies, he/she may take little comfort from the fact that airline networks intensively compete on a European or worldwide basis. This is the demand-side approach, taking into account the customers' requirements. A departure from the O&D approach would only be possible if airlines could enter a market quickly and without difficulty, should the airline on the route try to raise prices.[26] The Commission has, on several occasions, assessed network competition issues. It acknowledges that network competition exists and increases with the rapid extension of alliance networks in a liberalised environment.[27] Nonetheless, the Commission has so far concluded that it is unnecessary to change its well-established approach.

The Commission denies the possibility of determining an overall national or European market in *LH/SAS*, referring to the O&D approach of the Union Courts.[28] In *KLM/Alitalia*, it also rejects the parties' arguments which sought to justify a global air transport market where networks compete against each other.[29] *UA/US* repeats the argument but gives a more detailed explanation for the limited supply-side substitution.[30] In the Commission's opinion, airlines are not able to start services between all transatlantic city pairs and market them in the short term without incurring significant additional costs and risks. In 2012, more than 10 years after this decision, most of the regulatory barriers and economic considerations

25 See eg *UA/US* (n 16) para 11; *AF/KLM* (n 19) para 10; *LH/Swiss* (n 20) para 13; *LH/SN* (n 20) para 13; *LH/AuA* (n 20) para 13; *UA/CO* (n 20) paras 10-11; *IAG/bmi* (n 20) para 33.
26 See eg *UA/US* (n 16) para 12.
27 *LH/SAS* (n 16) para 35.
28 ibid para 34.
29 *KLM/Alitalia* (n 17) para 22.
30 *UA/US* (n 16) para 12.

arising from the hub-and-spoke systems still hinder rapid supply-side substitution on transatlantic markets.

In *AF/KLM*, the Commission addresses the network competition issue in detail.[31] After repeating the importance of the demand-side approach, the Commission finds that the network approach would be relevant only for network carriers.[32] Low-cost and regional airlines agree with the traditional O&D approach. Over the years, network competition was only raised as a serious possibility in relation to corporate contracts. As was evident in *AF/KLM*, the parties argued that corporate customers, like large multinational undertakings, increasingly considered contracting with airlines on the basis of the geographic coverage of their networks.[33] An undertaking, like Shell for example, has travel needs all over the world. Therefore, when choosing a travel supplier, they decide based on what the network airlines and their respective alliances can offer. A larger network would be more likely to meet the demands of this type of customer. Consequently, corporate customers could base their decision on the competitive strength of a network and would not be concerned with individual routes.

To date, the Commission has not, in any of its cases, identified a separate market for corporate customers, where demand would be network-specific and not route related. Experience tells us that, although corporate contracts cover multiple routes, certain important routes are treated separately. Discounts are also connected to the traffic on particular routes.

The *Ryanair/Aer Lingus* case offered another opportunity to reconsider the traditional O&D approach of the Commission. The case concerned the merger of two airlines operating from the same Member State and mainly from the same airport in Dublin. The merging parties' ease of entry into routes originating from Dublin raised the issue of supply-side substitutability between routes to/from Dublin.[34] However, the Commission chose to apply the O&D approach, referring to the demand-side aspects and the competitors' difficulties in switching between different markets.

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31 *AF/KLM* (n 19) paras 10-18.

32 ibid para 11.

33 *AF/KLM* (n 19) para 13. See also *LH/SN* (n 20) para 13; *DL/NW* (n 20) para 9; *UA/CO* (n 20) para 11; *BA/AA/IB* (n 20) para 18; *IAG/bmi* (n 20) para 31.

34 *Ryanair/Aer Lingus* (n 20) para 59.

As a consequence, the traditional O&D approach serves as an appropriate basis for analysing air transport markets. Network effect and supply-side substitution can be captured partly with a route-specific analysis, while other aspects form part of the competitive assessment at a later stage.[35] Network competition through one-stop services can appear as a competitive constraint, even if an O&D approach is applied. Similarly, competition by services to/from airports in the same catchment area can represent the network competition aspects. Those issues arising from network competition that cannot be dealt with within the framework of market definition will gain significance in the assessment of market power. Effects of frequent flyer programmes (FFP), corporate deals, market position at the hub city or traffic feed from the respective network may be considered as entry barriers. The Commission can also find anti-competitive effects that are not related to a particular route but, rather, the airlines' network characteristics.

In *IAG/bmi*, the Commission found that British Airways were able to engage in a foreclosure strategy consisting of restricting access to flights (or raising the costs of that access) for passengers connecting at Heathrow to services operated by other carriers in competition with British Airways on various long-haul routes.[36] In the same case, the Commission investigated British Airways' ability to dominate its London Heathrow hub in an anti-competitive manner.[37] In *LH/AuA*, the analysis concerning the merged entity's network strength in Central and Eastern Europe was also found not to be route-specific.[38] Furthermore, supply-side considerations also play an important role in the analysis of potential competition. Only those airlines are considered as credible new entrants on a particular route which, for example, operate their own hub at one of the airports concerned by the route in issue. In this way, the competitive assessment takes into account the industry specificities of aviation.

There is one notable exception to the generally applied O&D approach. Certain passengers, travelling for holiday purposes can be indifferent as to which destination they choose, provided it is warm and sunny. On these routes, a price increase can divert passengers from one destination to another equally sunny and warm

35 *AF/KLM* (n 19) para 17.
36 See eg *IAG/bmi* (n 20) paras 507-551.
37 ibid paras 483-506.
38 *LH/AuA* (n 20) paras 269-274.

destination. As a consequence, the two routes can be treated as substitutes.[39]

The experience of other jurisdictions supports the above conclusions on network competition. The most valuable experience is that of the US. As discussed in the section on US deregulation, the theory of contestable markets served as the cornerstone of the market opening. This contestable market theory would mean a complete departure from the O&D approach. It is the case of perfect supply-side substitution. The theory, nevertheless, proved inaccurate, at least with regard to network airlines. As to low-cost airlines, it seems that brand image or having a base at a particular airport can still provide some advantages compared to new entrants.[40]

Finally, the approach of the Australian Competition & Consumer Commission (ACCC) warrants particular mention. The ACCC usually applies a regional approach in international alliance cases, like international air passenger transport services between Australia and UK/Europe. It has done so because the distances involved in travelling from Australia make, at least for leisure passengers, alternative routings more viable. In such circumstances, and in most of the cases, it is considered inappropriate to define narrowly-defined markets on a city pair basis.[41] However, in short-haul and domestic markets they would also apply the O&D city pair approach.[42]

6.1.1.2 Airport substitution

The issue of airport substitution can be used in two ways to modify the original O&D city pair approach. It can serve to narrow down the relevant market to only certain airport pairs (eg Heathrow-JFK) or, contrastingly, it can result in the inclusion of additional city pairs (eg Brussels-Manchester/Charleroi-Liverpool). The Commission regularly examines the substitutability of airports.[43] Passengers

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39 *KLM/Martinair* (Case COMP/M.5141) [2009] OJ C51/4 paras 122-148.

40 See among others these arguments in *Ryanair/Aer Lingus* (n 20) paras 545-784.

41 See eg the Australian ACCC's authorisation A91247&A91248 of 3 February 2011 on *Virgin Blue Airlines' and others'* application; ACCC authorisation A91265&A91266 of 29 September 2011 on *Qantas Airways' and American Airlines'* application.

42 OECD 1999 (n 22) 126.

43 *British Midland v Aer Lingus* (Case IV/33.544) Commission Decision 92/213/EEC [1992] OJ L96/34 (*British Midland*) para 14; *AF/Sabena* (n 15) paras 34 and 39-42; *BA/TAT* (n 16) paras 20-23; *BA/Dan Air* (n 16) para 10; *Swissair/Sabena* (n 16) paras 20-24; *BA/Air Liberté* (n 16) para 15; *KLM/Air UK* (n 16) paras 23-24; *SAir/AOM* (n 16) paras 15-17; *AOM/AL/AL* (n 16) para 15; *UA/US* (n 16) paras 22-34; *KLM/Alitalia* (n 17) paras 27-28, 31 and 34; *AuA/LH* (n 19) paras 54-56; *BA/SN* (n 19) paras 16-17; *BA/IB/GB* (n 19) paras 19-26; *AF/KLM* (n 19) paras 24-

beginning or ending their journey in the catchment area of two or more airports can choose between those airports. Services from those airports can be substitutes from a demand point of view. The number of passengers in the overlapping catchment areas of airports should be sufficiently large to discipline the competitive behaviour of airlines operating at those airports. Depending on the circumstance, there can also be one-sided substitution between airports. In this case, passengers would switch from one airport to the other as a reaction to a price increase, but they would fail to do the same in the opposite direction. The assessment of airport substitution always requires a case-by-case assessment.

Different passenger types behave differently according to their travel preferences. It is possible that the same two airports will be considered as substitutes for long-haul passengers and also belong to separate markets for travel within the EU. In *UA/US*, the parties argue for airport catchment areas of 250km in the case of international gateway airports like Frankfurt or Munich, and 100km for German regional airports.[44] The Commission's investigation did not confirm this definition. In another case, on the other hand, it acknowledges larger catchment areas for long-haul flights and smaller ones for intra-EU services.[45] Business passengers travelling on the same city pair may not regard services between secondary airports as substitutes. Leisure passengers, on the other hand, may consider them on each occasion they fly.[46]

The size or overlap of an airport's catchment area largely depends on the overall travelling time of the journey the passenger intends to undertake and often on its purpose. Passengers take into account the convenience and cost of getting to an alternative airport.[47] Good public transport connections at affordable prices may convince passengers to consider services to/from other airports as well. Passengers evaluate the services offered from an airport, ie the flight times, schedules and frequencies. Business passengers, for example, prefer high frequencies with flight

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34; *AF/Alitalia* (n 19) paras 47-53; *LH/Swiss* (n 20) paras 65-66, 77 and 100; *LH/Eurowings* (n 20) paras 65, 82 and 96; *Ryanair/Aer Lingus* (n 20) paras 72-287; *IB/Vueling* (n 20) paras 52-63; *LH/SN* (n 20) paras 51-104, 116, 205-206 and 228; *LH/bmi* (n 20) 11-13 and 45-57; *LH/AuA* (n 20) paras 15-17, 110, 124-126 and 155; *IB/BA* (n 20) paras 19-33; *UA/CO* (n 20) paras 13-14; *BA/AA/IB* (n 20) paras 26-30; *IAG/bmi* (n 20) paras 43-67.

44 *UA/US* (n 16) paras 22-24.

45 eg *AF/KLM* (n 19) para 25.

46 For example, in the case of travel between Dublin and London, in *British Midland* (n 43) the Commission finds that Heathrow is the preferred airport (para 14), while in *Ryanair/Aer Lingus* (n 20) it involves all London area airports in the relevant market (paras 109-125).

47 See the analysis of *Ryanair/Aer Lingus* (n 20) paras 73-76.

times enabling them to return on the same day. Secondary airports with predominantly low-cost traffic usually offer one daily or less frequent flights, at flight times not optimal for business passengers. Business passengers may choose a primary airport also due to the availability of extra services like lounges, which they are entitled to use by reason of their membership in FFPs.

In *Ryanair/Aer Lingus*, the Commission, based on responses from airports, establishes a proxy of either a distance of at least 100 km or a driving time of at least 1 hour as the typical minimum catchment area.[48] However, this is only a first proxy and does not eliminate the need for a detailed case-by-case analysis concerning the individual airport pairs.[49]

Airport substitution should also be examined from a supply-side or airline perspective. The relevant question concerns the ability of airlines to change airports and reschedule their services at the alternative site. Network airlines have limited possibilities to do so, since they operate hubs and need traffic feed. Therefore, network carriers need enhanced airport infrastructure with large capacity. Point-to-point carriers, on the other hand, have lower expectations and increased mobility.[50] Airport substitutability for an airline depends on their passengers' needs and the market segment they would like to serve.

In *AF/KLM*, the Commission finds that Paris Charles de Gaulle and Paris Orly are substitutes for point-to-point airlines.[51] They are both within comparable distance from the city and have comparable access facilities. Transfer traffic, in contrast, prefers Charles de Gaulle due to the larger offer of connecting flights. Airlines with long-haul connecting flights would have difficulties in changing between Charles de Gaulle and Orly. Thus, for them, substitutability is limited.

As to the experience of other jurisdictions, airport substitution emerged as a crucial issue in the 1997 and 2001 *AA/BA* antitrust immunity cases of the DOT.[52] The DOJ

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48 ibid paras 82-85.

49 ibid para 83. See also *IAG/bmi* (n 20) para 49; *LH/bmi* (n 20) para 11; *LH/AuA* (n 20) para 15 or *LH/SN* (n 20) para 53.

50 Ryanair is famous for significantly and instantly downgrading services at airports where they have commercial disputes. The 2011 example of Alicante or the 2012 case of Morocco are notable from recent years.

51 *AF/KLM* (n 19) para 29.

52 *American/British Airways I* (Docket OST-1997-2058), Order 99-7-22; *American/British Airways*

argued, in its opinions to DOT, that Heathrow and Gatwick were in separate markets for business passengers concerning UK-US routes.[53] The DOJ explained the definition of separate markets with the following arguments.

The entry to Heathrow was seriously limited by the restrictions that existed at that time due to the Bermuda II Agreement.[54] Carriers consistently chose Heathrow as opposed to Gatwick if they had a choice to serve both airports. Heathrow has a much better location, closer to the London business district.[55] The preference of business passengers for Heathrow produced significantly higher yields (ie profitability) for Heathrow services.[56] The evidence also showed that most attempts to compete with the Heathrow service from Gatwick had been unsuccessful.[57] Airlines providing parallel services from Heathrow and Gatwick to US destinations discontinued their services from Gatwick or faced serious difficulties due to the poor performances of these services. Passengers clearly favoured services at Heathrow.

In *BA/City Flyer*, the UK Competition Commission conducts an extensive study of competition between Heathrow and Gatwick.[58] The decisive factors are the price, type of journey, origin and destination of the traveller, type of passenger, type of flight and frequency.[59] The Competition Commission finds that a sufficiently large proportion of passengers could be regarded as indifferent and, therefore, the airports form part of the same market.[60] On the other hand, in the *Air Canada/Canadian Airlines* case, which concerns the Canada-London markets, the Competition Commission defines separate relevant markets for Heathrow-Canadian destinations with regard to time-sensitive passengers.[61] A detailed and very interesting analysis

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II (Docket OST-2001-10387 and 11029), Order 2002-4-4.

53 Comments of the Department of Justice (21 May 1998) (DOJ 1998) 13-14, available at: <http://www.justice.gov/atr/public/comments/1777.htm> accessed 31 December 2012. Comments of the Department of Justice (17 December 2001) (DOJ 2001) 19-23, available at: <http://www.justice.gov/atr/public/comments/223248.htm> accessed 31 December 2012.

54 DOJ 1998 (n 53) 13.

55 ibid.

56 ibid 14.

57 DOJ 2001 (n 53) 20.

58 CC, *British Airways Plc and City Flyer Express Limited*, Cm 4346 (20.07.1999), a report on the proposed merger, available at: <http://www.competition-commission.org.uk/rep_pub/reports/1999/430ba.htm#full> accessed 31 December 2012.

59 ibid para 5.52.

60 ibid paras 2.66, 2.84 and 5.52-5.62.

61 CC, *Air Canada/Canadian Airlines Corporation*, Cm 4838 (02.08.2000), a report on the merger situations, para 2.31-2.34, available at:

can also be found on the substitutability between Milan airports in the *Alitalia/Volare* decision of the Italian competition authority, AGCM.[62]

6.1.1.3 Non-stop and one-stop flights[63]

The inclusion of network competition aspects in market definition can be achieved in various ways. One of the most obvious examples is to include one-stop or multi-stop flights within the relevant market. This acknowledges the fact that certain airlines can exert a competitive restraint on the non-stop services of competitors through a one-stop service via their own hub. The importance of one-stop services can differ from route-to-route depending on the distance of the flight, the geographic position of the hub or the time penalty that the extra stopover imposes. Business and leisure passengers may attribute different values to one-stop services since they have different preferences in terms of convenience, price or the total time of travel.

Indirect flights are generally of lower quality in the eyes of consumers since they need to make a stopover. However on long-haul routes, such as the transatlantic routes, the extra time penalty of using an indirect flight has lower impact on total travel time. Besides travel time, there are also other decisive criteria. Convenience of departure and/or arrival time, frequency, FFP benefits, or level of service can also be of importance. A competitor, although operating a one-stop service, may provide more beneficial conditions concerning other criteria, which would induce the passenger to choose the one-stop service.

On the other hand, as explained in previous chapters, airlines can increase frequencies with one-stop services via their hubs. The individual route segments of a one-stop service are not only dedicated to that particular O&D city pair but, also, to virtually all routes within the network. A one-stop service can be highly competitive if the hub-and-spoke network enables it to provide more frequent flights than would be economically justified when based solely on the local O&D demand. Given the

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<http://webarchive.nationalarchives.gov.uk/20111202195250/http://competition-commission.org.uk/rep_pub/reports/2000/443air.htm#full > accessed 31 December 2012.

62 Provedimento n. 12185 *Alitalia/Volare* (10 July 2003).

63 Throughout the thesis the non-stop/one-stop distinction is used. In several of the Commission's decisions the terminology direct/indirect flights is used. The use of the word 'non-stop' flights is more precise because direct flights can include also flights that may entail a refueling stop and/or a disembarking/re-embarking stop, under certain conditions. See *IB/BA* (n 20) 4 footnote 10.

limitations of air transport markets, it is often the case that only one-stop services can provide a daily connection on a city pair. Finally, one-stop services through the own hub can make it possible to enter certain markets which would not have a service at all.

Substitutability from one-stop services was excluded in early Commission cases due to the short-haul operations of the airlines involved.[64] In other earlier cases, the issue was only mentioned as a possibility in relation to long-haul routes.[65] In *KLM/Alitalia*, the Commission considers one-stop flights within its assessment, to the extent that - based on flight time, frequency and schedule - they offer a viable alternative to the non-stop service on the route.[66]

The issue of one-stop substitution clearly emerges as more significant in the assessment of transatlantic alliances or mergers with an effect on long-haul routes. The *LH/UA/SAS*[67] and *KLM/NW*[68] alliances and the *UA/US* merger all involved intensive market investigations on the issue. It was concluded that one-stop services constrain non-stop services on the transatlantic long-haul routes. One-stop services are viable alternatives depending on airline preference, price, schedule or the availability of direct flights.[69]

In *UA/US*, the Commission offers guidance on the circumstances in which a one-stop service can be regarded as a substitute for non-stop flights.[70] It has to be marketed as a connecting flight for that city pair in reservation systems. The extension of flight duration should be limited and the total travel time should still be comparable with the non-stop service.[71] In *UA/CO*, the Commission modifies the test of *UA/US*.[72] It

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64 *BA/TAT* (n 16) para 19; *BA/Dan Air* (n 16) para 10; *Swissair/Sabena* (n 16) para 26.

65 *SAir/AOM* (n 16) para 18; *SAir/SAA* (n 16) para 12; *SIA/Virgin* (n 16) para 18.

66 *KLM/Alitalia* (n 17) para 22.

67 *LH/SAS/UA* (Cases COMP/D-2/36.201, 36.076, 36.078) Commission notice concerning the alliance between Lufthansa, SAS and United Airlines [2002] OJ C181/2 (*LH/SAS/UA*) see also OJ C264/3.

68 *KLM/NW* (Case COMP/D-2/36.111) Commission notice concerning the Alliance between KLM Royal Dutch Airlines and Northwest Airlines, Inc [2002] OJ C181/6 (*KLM/NW*), see also OJ C264/5.

69 M Gremminger, 'The Commission's approach towards global airline alliances — some evolving assessment principles' (2003) 1 EC Competition Policy Newsletter 75 (Gremminger 2003); or IP/02/1569 (29/10/2002) Commission closes probe into *KLM/NorthWest and Lufthansa/SAS/ United Airlines* transatlantic air alliances.

70 *UA/US* (n 16) para 17.

71 150 minutes were suggested as the maximum connection time. The Commission used the same approach in subsequent cases. See *AF/KLM* (n 19) paras 21-23; *LH/Swiss* (n 20) para 17;

concludes that it is not important to apply a cut off at 120, 150 or 240 minutes (additional time) to determine which one-stop flights are included within the relevant market. All one-stop services can be taken into account in the assessment since their low competitive value will be reflected in any case in the small proportion of bookings they represent.

The most important exception to the general inclusion of one-stop services on long-haul markets comes from cases connected to London and the UK. The Commission in its first oneworld investigation excluded one-stop transatlantic London flights via other European hubs. The reason for doing so was backtracking, ie the need to travel eastwards before flying through the Atlantic westwards.[73] This is a serious time penalty and, therefore, is not preferred by passengers. In the most recent oneworld investigation of the Commission, the issue of one-stop services was not necessary to decide.[74]

With regard to medium-haul routes, the Commission considers one-stop flights as insufficient to provide competitive constraints on the non-stop operators. On the other hand, certain circumstances can justify a departure from this generally applicable conclusion. For example, on medium haul routes, such as Scandinavia-Spain that were examined in *SAS/Spanair*, one-stop flights are at a lower disadvantage than on short-haul services.[75] Depending on the route, the proportion of passengers travelling on one-stop flights was considerable in this case. The limited number of non-stop frequencies induced a large proportion of time-sensitive business passengers, but also leisure passengers, to choose one-stop services. Frequency delay offers an explanation here. The fact that the actual time of the normally preferred non-stop flight is so distant from the preferred travel time of business passengers increases the value of more frequent, albeit longer one-stop

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DL/NW (n 20) paras 16-18; *LH/SN* (n 20) paras 46-50; *LH/bmi* (n 20) paras 15-16; *LH/AuA* (n 20) para 27; *IB/BA* (n 20) para 17; *IAG/bmi* (n 20) para 69.

72 *UA/CO* (n 20) paras 19-25.

73 C Tomboy, 'The proposed British Airways-American Airlines alliance' (2002) 2 EC Competition Policy Newsletter 38 (Tomboy 2002). In the UK, the OFT came to the same conclusion in its *bmi*/*United* investigation. See case CP/1535-01 Notice of consultation issued pursuant to Rule 8(1)(a) of Schedule 1 of the EC Competition Law (Articles 84 and 85) Enforcement Regulations 2001 – 9 August 2002, Notification by *British Midland and United Airlines of their Alliance Expansion Agreement (bmi*/*United)*, para 65.

74 *BA/AA/IB* (n 20) paras 23-25.

75 *SAS/Spanair* (n 16) paras 13-18.

flights.[76]

In *AF/KLM*, the Commission comes to the conclusion that on short-haul routes one-stop flights provide a suitable alternative only under exceptional circumstances.[77] The issue requires a case-by-case assessment. The exceptional circumstance was the following. On the Amsterdam-Bordeaux and Amsterdam-Marseille routes, Air France with its 6 daily one-stop service had a significant market share (20-35%) since Basiqair offered only 1 daily flight. Notwithstanding the longer travel time, the one-stop service clearly enabled a one-day return trip.[78] Latter possibility is particularly important for business passengers. Subsequent decisions applied the same principle.[79]

The potential inclusion of both non-stop and one-stop services in the relevant market means that on the same flight there might be passengers who are counted for the O&D city pair A while the person next to him to O&D city pair B. Under these circumstances it can happen that market A is perfectly competitive, while B is a monopoly, and still the 2 passengers sit next to each other. They use the same aircraft and the number of passengers can have significant effects on the cost and the viability of both services. A higher number of connecting passengers can lower costs and increase capacity thereby affecting competition on the point-to-point market. The markets are interrelated. Therefore, the effect of connecting traffic should be taken into account at later stages, during the overall competition assessment of affected O&D routes.[80]

6.1.1.4 Substitution with other modes of transport

Given the geography of Europe, the location of the densely populated areas and the well-developed motorway/high-speed train networks, substitution from other

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[76] See also *LH/Swiss* (n 20) para 17; *LH/Eurowings* (n 20) para 11; *Ryanair/Aer Lingus* (n 20) paras 288-289; *LH/SN* (n 20) paras 37 and 44; *LH/AuA* (n 20) para 26; *IB/BA* (n 20) para 17; *IAG/bmi* (n 20) para 69.

[77] *AF/KLM* (n 19) para 20.

[78] ibid para 80.

[79] *AF/Alitalia* (n 19) para 57; *BA/IB/GB* (n 19) para 19; *BA/SN* (n 19) para 15; *LH/Swiss* (n 20) para 17; *LH/Eurowings* (n 20) para 11; *IB/Vueling* (n 19) para 33; *Ryanair/Aer Lingus* (n 20) paras 288-291; *LH/SN* (n 20) paras 37-44; *LH/bmi* (n 20) para 17; *LH/AuA* (n 20) para 25; *IB/BA* (n 20) para 17; *IAG/bmi* (n 20) para 69; see also *AuA/LH* (n 19) para 53 and *LH/SAS* (n 16) para 36, where the short distances between Austria/Germany and Scandinavia/Germany limited the one-stop flights as a real alternative.

[80] ECA 2004 (n 6) para 11.

transport modes often arises. As mentioned above, in *Ahmed Saeed* the Court of Justice chooses to include in the definition of the relevant market alternatives that cannot be distinguished by virtue of specific characteristics.[81] On certain routes, therefore, substitution with railways and road transport may be examined as a competitive constraint.

In the *British Midland* case, the Commission dealt with this issue in detail.[82] The case concerned travel on the London-Dublin route. Based on the characteristics of surface transport (speed, convenience, several changes of transport means) the Commission excluded it as a substitute from a demand point of view for the great majority of the travellers. However, it acknowledges that some price sensitive travellers may consider surface transport and travel on the cheapest fare classes as substitutes.[83] At the times when European high-speed train networks were still limited in size, several decisions followed the approach of *British Midland* and only found imperfect substitution from railways.[84]

While in *LH/SAS* the Commission already acknowledged that theoretically high-speed trains offer an alternative to air transport,[85] in *BA/TAT II* it identifies Eurostar as a competitive constraint on air transport services between Paris and London.[86] When assessing the substitutability of railway services, the Commission takes into account the total travel time from city centre to city centre. Accordingly, in the case of flights, one has to add the time necessary for check-in and the total time to/from the airports at both ends of the route.[87] According to the Commission, consumers decide based on total travel time rather than distance. Whenever total travel time is not significantly longer than the aggregate time of air transport, even time sensitive passengers will regard other transport modes as substitutes.[88] Substitutability analysis also includes, as a second step, the comparison of prices for the different

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81 *Ahmed Saeed* (n 9) para 9.
82 *British Midland* (n 43) para 14.
83 ibid.
84 *AF/Sabena* (n 15) paras 25 and 31; *Swissair/Sabena* (n 16) para 26; *BA/Air Liberté* (n 16) para 15.
85 *LH/SAS* (n 16) para 32.
86 *British Airways/TAT II* (Case IV/M.806) [1996] OJ C316/11 para 20.
87 ibid para 33.
88 *AuA/LH* (n 19) para 58. When comparing total travel times, for air transport the Commission calculates with the actual travel time, servicing time (45 min) and the time needed to get at the airport from the city centre (one hour at each end of the route). The time added for the travel time varies according to the characteristics of the particular route.

transport modes.[89]

The Eurostar services through the Channel Tunnel lend themselves as the most evident form of substitution from other transport modes. In fact, due to the competition from Eurostar, most of the network airlines drastically reduced their capacity on the Paris/Brussels-London routes. Current capacity serves only connecting flights for their long-haul flights. Market definition in cases relating to these routes evolved accordingly and now comprises both transport modes, where rail clearly dominates the sales.[90]

It is unsurprising that railway transport is the most often discussed form of intermodal competition in EU cases.[91] However, road transport was also examined several times and sometimes even found as a substitute for air transport among all types of passengers.[92] Finally, substitutability from ferry services was also considered in some cases,[93] most notably in *Olympic/Aegean* where the Commission extensively deals with evidence on substitutability between these two transport modes.[94]

6.1.2 Differentiation according to different passengers groups

In the forgoing section on air transport demand, it was briefly discussed that airline passengers can be grouped into distinct categories according to their different

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89 See *AuA/LH* (n 19) para 60; *AF/KLM* (n 19) para 72; *AF/Alitalia* (n 19) para 58; *LH/Swiss* (n 20) paras 59 and 64; *LH/Eurowings* (n 19) para 61; *IB/Vueling* (n 19) para 37; *LH/AuA* (n 20) para 144; *IAG/bmi* (n 20) para 251.

90 *BA/SN* (n 19) paras 18-21 and 23; See also C Tomboy, 'Commission approves partnership between British Airways and SN Brussels Airlines' (2003) 2 EC Competition Policy Newsletter 64; joined cases T-374/94, T-375/94, T-384/94 and T-388/94 *European Night Services Ltd and others v Commission* [1998] ECR II-3141 (ENS) para 90; *Eurostar* (Case IV/M.1305) [1999] OJ C256/3 (*Eurostar*) paras 8-27; *SNCF/LCR/Eurostar* (Case COMP/M.5655) [2010] OJ C272/2 (*Eurostar II*) paras 21-30; *LH/SN* (n 20) paras 338-340; *LH/bmi* (n 20) para 63.

91 In addition to the cases referred in the previous footnote, see in particular *SAS/Maersk* (n 12) paras 33, 39 and 44; *AuA/LH* (n 19) paras 57-61; *AF/KLM* (n 19) paras 69-72; *AF/Alitalia* (n 19) para 60; *LH/Swiss* (n 20) paras 55-59 and 63-64; *LH/Eurowings* (n 20) paras 51, 56-57, 60-61, 70 and 72; *Ryanair/Aer Lingus* (n 20) para 294; *LH/SN* (n 20) paras 117-140; *IB/Vueling* (n 20) paras 36-40 and 244-245; *LH/bmi* (n 20) paras 63-64; *LH/AuA* (n 20) paras 141-144 and 189; *Olympic/Aegean* (n 20) paras 272-277 and 1362-1384; *IAG/bmi* (n 20) paras 75-77, 191, 213-216, 249 and 251-253.

92 *AF/Alitalia* (n 19) para 59. On the Milan-Nice route, the Commission found road transport as an alternative to direct flights for both time- and price-sensitive passengers. See also *SAS/Maersk* (n 12) paras 33, 39 and 44; *AuA/LH* (n 19) paras 57-61; *Ryanair/Aer Lingus* (n 20) para 295.

93 *SAS/Maersk* (n 12) para 45; *Ryanair/Aer Lingus* (n 20) para 295; *IB/Vueling* (n 20) paras 41-45.

94 *Olympic/Aegean* (n 20) paras 94-271. Substitution from ferry services is also the second plea of the currently ongoing appeal case of the Olympic/Aegean merger, see case T-202/11 *Aeroporia Aigaiou Aeroporiki and Marfin Investment Group Symmetochon v Commission.*

characteristics.[95] This market segmentation has important implications for an airline's pricing policies[96] and the way network airlines operate and organise their network structure.[97] The question arises as to whether and how this market segmentation should be taken into account at the level of market definition. The question is all the more important, given that the aforementioned substitution from alternative airports, transport modes or one-stop flights may be decided differently depending on the composition of the relevant market.

The market definition notice says[98] that

> '[…] the extent of the product market might be narrowed in the presence of distinct groups of customers. A distinct group of customers for the relevant product may constitute a narrower, distinct market when such a group could be subject to price discrimination. This will usually be the case when two conditions are met: (a) it is possible to identify clearly which group an individual customer belongs to at the moment of selling the relevant products to him, and (b) trade among customers or arbitrage by third parties should not be feasible'.

Accordingly, the definition of separate relevant markets is justified for certain passenger groups whenever it holds that airlines can identify the passenger as belonging to one of the passenger segments and at the same time they can force the passenger to buy the product 'designed' for the passengers' special willingness to pay. As shown in Chapter 4, a widely recognised distinction is the business/leisure traveller distinction among airline passengers. The case law does, however, use the terms 'time-sensitive/non-time-sensitive' or 'time-sensitive/price-sensitive' which offer a better characterisation of the two passenger groups.[99]

Air travel can have many attributes that are perceived differently by the above passenger groups. Frequency, seat availability just before departure, flexibility in terms of reservation changes, short flight times (no stopovers or just a minimal

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95 Section 4.4.1 Drivers and characteristics of air transport demand.
96 Section 4.4.4 Characteristics of pricing.
97 Section 4.4.5 Airline networks, hub-and-spoke system.
98 Market definition notice (n 2) para 43.
99 Throughout this thesis the business/leisure and time sensitive/non-time sensitive distinctions are used more or less with the same meaning describing the two main passenger groups.

number of it), quality of in-flight services and prices are all important elements of air transport services. For passengers travelling mainly for business purposes, the time factor is most decisive. They prefer high frequencies to enable same day return, booking just before departure, flexibility to change the ticket according to their modified travel plans, and increased flight comfort (especially on long-haul routes). Prices play a less decisive role in their choice of product due to their higher willingness to pay for these extra services and the fact that, generally speaking, the employer pays for the ticket. These types of passengers are often referred as time-sensitive passengers or business travellers. In the latest cases on alliances, the Commission uses the terms premium/non-premium passengers which denote passengers who buy first, business or premium economy class tickets who also value travel comfort and high service levels.[100]

The consumers in the other group are price sensitive and travelling primarily for leisure purposes. Their main concern is the price of the airline tickets. For having lower prices they are prepared to accept restrictions on refund and other changes, they make their bookings well in advance and pay earlier. They do not require high frequencies since they do not plan to return on the same day and usually they are also indifferent concerning departure times. These passengers also consider and regularly use one-stop services by trading-off the increased travel time against the discounted prices.

The existence of distinct passenger groups does not, however, automatically mean that airlines can easily identify them and successfully discriminate among these groups. Only in the latter case would it be justified to define separate relevant markets for time-sensitive and non-time sensitive passengers. Although airlines would face difficulties in finding out each passenger's personal motivation for travel, they apply very sophisticated methods designed in such a way that passengers self-select themselves and reveal their degree of price sensitivity. When purchasing their tickets, time-sensitive passengers present special needs, which reveal them as high-yield travellers. Their inability to book well in advance, the times of day and week they travel, their need for flexibility and their relatively short business trips compared to holidays, all indicate their characteristics as a passenger.

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[100] *BA/AA/IB* (n 20) para 21; *UA/CO* (n 20) paras 15-17; *AC/CO/LH/UA* (n 20) para 5.

The so-called 'fences' around the different fare products such as duration and departure time limitations, purchase time restrictions, payment and refund conditions all serve the purpose of hindering arbitrage between the different consumer groups. The aim is to make all time-sensitive passengers buy airline tickets according to their willingness to pay. The remaining seats can be sold at discounted prices, although only to hinder flying them empty.

Another effective tool supplementing price discrimination is revenue/inventory management used by almost all network airlines, as well as several low-cost airlines. Time-sensitive passengers are once again induced to purchase more expensive tickets by the airlines which close the availability of discounted fares close to the flight departure and only leave open more expensive fare categories.

To conclude, the specificities of airline pricing and the existence of passenger groups with different demand characteristics, in most of the cases, warrant the definition of separate relevant markets for time-sensitive (premium) and non-time sensitive (price-sensitive, non-premium) passengers.[101]

In the *British Midland* case, reference is made to different passenger groups. The Commission argues that some travellers, 'in particular price conscious leisure travellers', might consider other transport modes as interchangeable.[102] Concerning the substitution between Heathrow and other London airports, the Commission refers to business travellers who would strictly prefer Heathrow and only a small group who would be prepared to use other airports as well. Similarly, in other early Commission decisions, the distinction between different passengers groups was connected to substitution issues.[103]

In its judgment in the *European Night Services* case, the General Court recognises the distinction between time and price sensitive passengers concerning transport

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101 For a more detailed analysis on the justifications of defining separate markets for time sensitive and non-time sensitive passengers due to the airlines' ability to price discriminate see *LH/SN* (n 20) paras 15-35; *Olympic/Aegean* (n 20) paras 52-93. In previous cases the issue of price discrimination was rarely mentioned, in that regard see *Eurostar* (n 90) para 19; *AF/Alitalia* (n 19) para 41; *LH/Swiss* (n 20) para 15; *LH/Eurowings* (n 20) para 12; *IB/BA* (n 20) para 14.

102 *British Midland* (n 43) para 14.

103 *BA/TAT* (n 16) para 21 (airport substitution); *Swissair/Sabena* (n 16) para 21 (substitution of charter operations); *LH/SAS* (n 16) para 31 (substitution of charter operations).

services across the Channel Tunnel.[104] The Commission comes to the same conclusion in the *Eurostar* case.[105] *KLM/Alitalia* provides the first occasion where the time-sensitive/non-time sensitive distinction is expressly mentioned separately in relation to air transport services.[106] The various alliance investigations gave the first examples of defining separate markets for time-sensitive and non-time sensitive passengers in air transport cases.[107]

In *UA/US*, the Commission forms the opinion that for transatlantic routes the line between time and price sensitive passengers becomes increasingly blurred.[108] According to the market investigation, the choice of business passengers is not necessarily based on travel times. However, this conclusion does not contradict the distinction between different passenger groups. By applying the premium/non premium passenger terms the distinction can still hold. Apart from the numerous cases establishing separate markets for time-sensitive/non-time sensitive passengers,[109] there is only one case, *Ryanair/Aer Lingus*, which expressly departs from this established practice. The reasons are very case-specific. While the other cases all concern at least one network airline that routinely applied the aforementioned techniques for segmenting passengers, low-cost airlines do not entertain such systems. Both Ryanair and Aer Lingus applied one-way tickets that do not enable price discrimination.[110] The Commission considers, therefore, that the time-sensitive/non-time sensitive distinction is not relevant in the case.[111] In this case, the Commission also explores other possibilities but concludes that the relevant

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104 *ENS* (n 90) para 90.

105 *Eurostar* (n 90) paras 14-21. See also *Eurostar II* (n 90) paras 17-19.

106 *KLM/Alitalia* (n 17) para 21.

107 Commission notice concerning the alliance between British Airways and American Airlines (OJ 98/C 239/05) British Airways/American Airlines (Case IV/36.089); Tomboy 2002 (n 73) 38; *LH/SAS/UA* (n 67); T Soames and G Goeteyn, 'Airline mergers and alliances: EU regulatory issues' (2001) 16(1) Air and Space Lawyer 13; *British Midland Ltd/Deutsche Lufthansa AG/Scandinavian Airlines System* (Case COMP/38.712) [2001] OJ C83/6 (*bmi/LH/SAS*); O Stehmann 'Commission approves British Midland International joining STAR alliance' (2001) 3 EC Competition Policy Newsletter 45 (Stehmann 2001).

108 *UA/US* (n 16) para 18.

109 *AuA/LH* (n 19) para 47; *SAS/Maersk* (n 19) paras 30-31; *BA/SN* (n 19) paras 10-11; *BA/IB/GB* (n 19) paras 14-15; *AF/KLM* (n 19) para 19; *AF/Alitalia* (n 19) paras 44-46; *LH/Swiss* (n 20) para 15; *LH/Eurowings* (n 20) para 12; *DL/NW* (n 20) para 14; *IB/Vueling* (n 20) paras 46-51; *LH/SN* (n 20) paras 15-35; *LH/AuA* (n 20) paras 18-22; *IB/BA* (n 20) paras 11-15; *Olympic/Aegean* (n 20) paras 52-93; *IAG/bmi* (n 20) paras 36-42.

110 *Ryanair/Aer Lingus* (n 20) paras 313 and 318.

111 ibid 319.

market should be that of scheduled passenger air transport.[112]

With regard to international examples, the experience of the US warrants further mention. In its comments on the second oneworld case before the DOT, the DOJ expresses high scepticism in relation to American Airlines' and British Airways' argument that they have no ability to use fare restrictions to price discriminate against time-sensitive passengers.[113] According to the DOJ, this would imply that the complicated pricing structures and sophisticated yield management systems that carriers have constructed at great cost are ineffective and do not allow airlines to segment demand and discriminate between business and leisure passengers.[114] The DOJ states that airlines have a substantial ability to price discriminate among passengers.[115] In subsequent alliance cases the DOJ maintained this argument when it argued that one-stop services are not in the same market for a large group of passengers, ie time-sensitive passengers.[116] Crocioni also finds that there is substantial evidence on the success of airlines in price discriminating between different customer groups.[117] Nevertheless, he also argues that supply-side substitution can occur with no sunk costs, which would argue against distinct markets.[118]

Supply-side substitution leads us to examples from Australia and New Zealand, as these aspects were not examined in either European nor US case law. In its 2003 investigation of the *Air New Zealand/Qantas* alliance, the New Zealand Commerce Commission (NZCC) deals extensively with supply-side substitution between business and leisure markets.[119] The NZCC accepts that an airline with satisfactory premium product can also relatively easily provide a satisfactory leisure product. Substitution in the other direction, is already more problematic.[120] The NZCC finds

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112 Business/leisure passengers (paras 320-323); late booking customers (paras 324-327); price insensitive ('low frills') customers (paras 328-329); conclusion (para 332).

113 DOJ 2001 (n 52) 17.

114 ibid.

115 ibid 18.

116 DOJ Star (n 24) 21; DOJ oneworld (n 24) 9.

117 Crocioni 2000 (n 7) 18.

118 ibid 19.

119 Commerce Commission Final Determination, Determinations pursuant to the Commerce Act 1986 in the matter of an application for authorisation of a business acquisition and in the matter of an application for authorisation of certain restrictive business practices and involving: *Air New Zealand and Qantas Airways Limited*, 23 October 2003 (*ANZ/Qantas 2003 CC*) paras 227-236.

120 ibid para 231.

that many of the costs incurred by airlines are the same for business and leisure products[121] and economies of scope can result lower unit costs. Serving a wider range of customers may help to smooth out seasonal fluctuations in demand.[122] Based on the above considerations, the NZCC's final report concludes that business and leisure service products are only distinct segments of a differentiated product market, rather than separate markets.[123] This approach is partly explained by the degree of supply-side substitution.

The Australian ACCC also dealt with the issue of supply-side substitution. In its 2005 revision of *Qantas' and British Airways' alliance cooperation*, the ACCC notes that a key input to the provision of airline passenger services is economy class seats.[124] The same seat can be sold for fully flexible or deeply discounted fares depending on supply and demand. At the same time, it can be held back for late booking passengers. Nevertheless, this supply-side substitution is not sufficient enough to include both business and leisure products in the same market.[125] On long-haul flights such as Australia-Europe, the demand-side characteristics differ to such an extent that cabin reconfiguration would be substantial and costly. Furthermore this assessment is not just limited to seat configuration or fare structure but other expectations of business passengers. The ACCC, therefore, considers that separate product markets have to be defined.[126] The same conclusion was reached after re-examining the issue in the 2010 revision of the alliance cooperation.[127]

The ACCC argues differently in its recent *Virgin Blue/Air New Zealand* case.[128] Compared to the previous cases of long-haul travel, in short-haul markets, substitution is no longer so costly and time-consuming.[129] With their notified agreement, the parties propose to modify their service model 'to enable them to meet the requirements of different passenger types through a combination of

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121 Airlines use the same pilot, aircraft, fuel, landing fee, crew, etc. for the 'production' of both business and leisure cabin products. Airlines generally also offer the two products together.

122 *ANZ/Qantas 2003 CC* (n 119) para 232.

123 ibid para 234.

124 ACCC authorisation A30226 and A30227 of 8 February 2005 on *Qantas Airways' and British Airways'* application para 9.70.

125 ibid para 9.71.

126 ibid para 9.79.

127 ACCC authorisation A91195 and A91196 of 31 March 2010 on *Qantas Airways' and British Airways'* application paras 4.22-4.28.

128 ACCC authorization A91227 & A91228 of 16 December 2010 *Virgin Blue's and others'* application.

129 ibid para 5.14.

product/service offerings rather than by offering distinct cabin types'.[130] Virgin subsidiary, Pacific Blue, implemented network airline features on its services without reconfiguring seating and cabin arrangements. The ACCC finds this to constitute a lessening of limitation to supply-side substitution[131] and concludes that business and leisure passengers form part of the same relevant market.[132]

6.1.3 Charter operations and low-cost competition

The last issue of substitutability concerns competition from charter airlines and low-cost airlines. The issue on substitution also depends on whether the question was raised in the context of time-sensitive or non-time sensitive passenger markets. The usual features of charter operations or low-cost services largely differ from those required by time-sensitive passengers. On purely leisure destinations, on the other hand, charter airlines may provide significant competition.

One of the main characteristics of charter services is the absence of a schedule, they are operated as and when demand requires. Tour operators are the prime customers of this service as they resell the seats as part of package holidays. The latter product is considered as a separate product from transport services since it also includes accommodation, airport transfer and other elements which holidaymakers usually demand. In recent years, however, charter airlines increasingly sell 'seat only' or 'dry seat' tickets which individual passengers can buy through the websites of these airlines. Charter aircraft are flown on a seasonal basis with low weekly frequencies, in a high-density seating configuration without attention to peak periods.

Before the explosion of low-cost traffic in Europe, low-cost services were more or less only treated as a substitute for non-time sensitive passengers. It was argued that the low frequency services to secondary airports without the additional service elements that time-sensitive passengers usually require have no appeal for these passengers. With around 40% market share in Europe, these assumptions can no longer be held as legitimate. Low-cost services are treated as part of the general market of passenger air transport and, depending on the circumstances, they provide different levels of competitive constraints on network airlines.

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130 ibid para 5.15.
131 ibid para 5.16.
132 ibid para 5.18.

The Commission mentions the possibility of competition from charter airlines only on a few occasions, and generally considers them to belong to separate product markets.[133] In *Ryanair/Aer Lingus*, the Commission examines the substitutability of charter operations and especially 'dry seat' offers with the services of low-cost airlines but fails to identify any significant competitive constraint, even in these relationships.[134] Interestingly, the experience of the Bundeskartellamt offers different conclusions on the substitutability of charter services and scheduled air transport. In a series of decisions, the Bundeskartellamt repeatedly defined a single market for charter, scheduled and low-cost airlines.[135]

6.2 Article 101 TFEU and airline alliances

Article 101(1) TFEU both sets out a general prohibition on agreements, decisions by associations of undertakings and concerted practices which restrict competition and provides a non-exhaustive list of prohibited practices:[136]

> 'The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:
>
> (a) directly or indirectly fix purchase or selling prices or any other trading conditions;

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133 The Commission considered charters as an alternative in *Swissair/Sabena* (n 16) para 21; and mentions this possibility for non-time sensitive passengers in *BA/IB/GB* (n 19) paras 29-32; The Commission established no substitution with charter operations in *LH/SAS* (n 16) para 31; *SAir/LTU* (n 16) paras 14-15; *SAir/AOM* (n 16) paras 11-12; *KLM/Alitalia* (n 17) para 52; *SAS/Maresk* (n 12) paras 35-36; *AuA/LH* (n 19) para 45; *AF/KLM* (n 19) para 93; *AF/Alitalia* (n 19) para 56; *KLM/Martinair* (n 39) paras 111-121; *Olympic/Aegean* (n 20) paras 45-51. On substitution of scheduled flights to seat sales to tour operators (ie substitution in the other direction) see *Airtours/First Choice* (Case COMP/M.1524) [2000] OJ C93/1 paras 34-42; *TUI/First Choice* (Case COMP/M.4600) [2007] OJ C137/6 paras 52-57; *KarstadtQuelle/My Travel* (Case COMP/M.4601) [2007] OJ C113/1 paras 39-43.

134 *Ryanair/Aer Lingus* paras 297-311.

135 B 9 – 62100-U-147/00 Beschluss in dem Kartellverwaltungsverfahren *Deutsche Lufthansa/Eurowings* (19 September 2001) 14; B 9 – 67/07 Beschluss in dem verwaltungsverfahren *Air Berlin/LTU* (7 August 2007) 8; B 9 – 56/09 Beschluss in dem verwaltungsverfahren *TUI/Air Berlin* (4 September 2009) 15.

136 Case C-209/07 *Competition Authority v Beef Industry Development Society Ltd* [2008] ECR I-8637 (*Beef Industry*) para 23.

(b) limit or control production, markets, technical development, or investment;

(c) share markets or sources of supply;

(d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.'

Article 101(3) TFEU, on the other hand, establishes an exception provided four criteria are fulfilled:

'The provisions of paragraph 1 may, however, be declared inapplicable in the case of:

- any agreement or category of agreements between undertakings,

- any decision or category of decisions by associations of undertakings,

- any concerted practice or category of concerted practices,

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

(a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;

(b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.'

Agreements that cannot satisfy these conditions are automatically void under Article 101(2) TFEU:

'Any agreements or decisions prohibited pursuant to this Article shall be automatically void.'

Based on the wording of Article 101(1) TFEU above, the following elements must be established for the provision to apply:

- That independent undertakings exist;
- That there is an agreement or concerted practice between these undertakings (see section 6.2.1);
- That the agreement or concerted practice has as its object or effect the prevention, restriction or distortion of competition (see section 6.2.3);
- That the effect on competition is appreciable (see section 6.2.2);
- That there is an appreciable effect on trade between Member States.

In the assessment of airline alliances, the existence of undertakings is never in doubt. Airlines operate as commercial undertakings in the liberalised environment and are often publicly listed companies. Even in countries where the national flag carrier has not yet been privatised, it nevertheless operates as a commercialised entity, organisationally independent of ministries or other State bodies.

The nature of airline alliances also means that the existence of an agreement is also evident in all cases, just like effect on trade between Member States.[137] However, issues can arise as to how these agreements should be qualified: whether they should be examined under Article 101(1) TFEU or the EUMR.[138] Finally, it is also useful to consider whether the restriction of competition is appreciable.

6.2.1 Agreement between undertakings

The existence of agreements between airlines as undertakings is never in doubt in the process of assessing airline alliances. The issue that sometimes requires clarification, on the other hand, is whether such agreements should be treated as cooperative joint ventures under Article 101 TFEU or rather as full function joint ventures under the

[137] Alliance agreements are by their nature capable of affecting trade between Member States due to the international cross-border aspects of air transport. Consequently they will always fall within the scope of EU competition law. See eg *LH/SAS* (n 16) para 63; *AuA/LH* (n 19) para 83; *bmi/United* (n 73) paras 73-76; *BA/SN* (n 19) para 53; *BA/IB/GB* (n 19) para 36; *AF/Alitalia* (n 19) para 104; *BA/AA/IB* (n 20) para 31.

[138] Council Regulation (EC) 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1 (EUMR).

EUMR.

As discussed in Chapter 3, joint ventures must perform, on a lasting basis, all the functions of an autonomous economic entity from an operational point of view to come under the scope of the EUMR.[139] The joint venture has to carry out the same functions as any other undertaking operating in the market. This means that it must have a management dedicated to its day-to-day operations and access to sufficient resources in order to conduct its business activities on a lasting basis.

Airline alliances rarely involve cooperation of such intensity. For example in the case of Lufthansa and SAS, their agreement establishes a jointly and equally owned, jointly managed joint venture, which covers transport services between Scandinavia and Germany.[140] The joint venture, nonetheless, is dependent upon its parent companies. Both Lufthansa and SAS maintain their commercial identity, provide transport services under their own brand name and neither provide the necessary resources to the joint venture for operations on a lasting basis.[141] The joint venture therefore functions only as a 'sales agency' for the parties. It cannot be regarded as a new face on the market. Furthermore, the parent companies could enter the market of the joint venture, as they have not withdrawn permanently.[142] Consequently, the cooperation does not satisfy the criteria of the EUMR.[143]

The only exception to this general approach to alliance cooperation was the failed cooperation of KLM and Alitalia.[144] The parties had planned to create two ventures, one for passenger transport and one for cargo.[145] Due to the international regime governing air transport, the ventures would not have had separate legal personalities. The operations of the two parent undertakings, however, were intended to be jointly run and marketed through the venture. The parents would have made available all assets and capacity needed for day-to-day operations.[146] This structure would have enabled the parties to share cost and revenue and to jointly maximise profits. The

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139 See section 3.2.3.1 Strategic alliances, which are concentrations.
140 *LH/SAS* (n 16) para 39.
141 ibid para 40.
142 ibid para 41.
143 See also *AuA/LH* (n 19) paras 29-30, and 41-43; *bmi/LH/SAS* in Stehmann 2001 (n 107) 44; *KLM/NW* (n 68); *AF/Alitalia* (n 19) paras 36-38; *BA/AA/IB* (n 20).
144 *KLM/Alitalia* (n 17).
145 ibid paras 4-8.
146 ibid paras 13-16.

decisions of the ventures would have been made by KLM and Alitalia, with strategic decisions being taken by the ventures and no scope for the parties to take decisions individually. The condition of joint control, therefore, was satisfied.[147] The alliance qualified as a full-function joint venture assessed under the EUMR.

6.2.2 Appreciable effect on competition

The requirement of Article 101(1) TFEU, that competition should be restricted appreciably raises interesting issues in air transport cases. The appreciability requirement or *de minimis* doctrine aims to avoid insignificant restrictions being dealt with under EU competition law. The Court of Justice developed the doctrine of *de minimis* restrictions in its judgment of *Völk*.[148] According to the Court of Justice, 'an agreement falls outside the prohibition of Article [101(1)] where it has only an insignificant effect on the market, taking into account the weak position which the persons concerned have on the market of the product in question'.[149] The Commission's *de minimis* notice[150] provides further clarification regarding appreciability and identifies cases where the Commission will not initiate proceedings.[151] Accordingly, no appreciable restriction can be established if the parties' market share does not exceed 10%. The *de minimis* notice applies to all sectors including air transport. The Commission's practice, however, appears to have elaborated a specialised *de minimis* rule for air transport, independent of the above general *de minimis* concepts.

In *LH/SAS*, the Commission establishes that the exemption conditions intended to remedy the restrictive effects of cooperation do not apply to routes with a capacity of 30 000 or fewer seats per year.[152] Interestingly, the decision refers to Article 6(1) of Regulation 2408/92 on market access.[153] This provision allowed Member States to restrict entry temporarily on certain regional routes. The Commission interpreted this

147 ibid paras 9-10.
148 Case 5/69 *Völk v Vervaecke* [1969] ECR 295.
149 ibid.
150 Commission notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community [2001] OJ C368/07 (*de minimis* notice).
151 ibid para 4.
152 *LH/SAS* (n 16) para 90; This capacity is the equivalent of one weekly long-haul flight or twice weekly flight with a mainline narrow-body aircraft or a 4 times weekly flight with regional jets.
153 Council Regulation (EEC) 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes [1992] OJ L240/8.

provision as a threshold below which competition is not necessarily ensured. In contrast to the original idea underpinning the *de minimis* doctrine, the above provision seems to function as a *de minimis* threshold based on the size of the total market rather than the position of market participants. The subsequent case law does not clarify further the functioning of this '30 000 rule': on the contrary, it creates more confusion.

One line of cases interprets and applies the 30 000 rule as a threshold for selecting those routes where competition is unsustainable and natural monopoly characteristics can be assumed.[154] These cases appear to argue that there is no competition to be protected on these routes. At the same time, the other line of cases suggests that the 30 000 rule serves as a true *de minimis* threshold connected to the overall size of the market.[155] Routes under the threshold do not warrant antitrust scrutiny regardless of whether competition can be sustained or not.[156] This special *de minimis* threshold for aviation appears to suggest that certain routes simply fall outside the scope of EU competition law. This market size-related *de minimis* threshold is made still more inconsistent with EU competition law because the appreciability requirement of the effect on trade criterion should in theory cover any such considerations.

This practice looks even more problematic for object restrictions such as revenue-sharing joint ventures. In her opinion in the *Expedia* case AG Kokott, finds that object restrictions can hardly be regarded as *de minimis* infringements and that it must be presumed that the undertakings involved always intend an appreciable effect irrespective of the size of their market share and turnover.[157] She concludes that the requirements concerning proof of the appreciability of an object restriction should 'under no circumstances be more stringent than the requirements concerning proof of

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154 In its *bmi/United* decision (n 73) the OFT applying EU competition law concluded that the parties cannot be regarded as a potential competitor on certain 'thin' routes (32 000-57 000 passengers). *bmi/United* (n 73) para 94; *BA/SN* (n 19) para 50; *AF/KLM* (n 19) para 83; *LH/AuA* (n 20) para 198; *LH/bmi* (n 20) paras 80-83; *IB/BA* (n 20) 14 footnote 50; *Olympic/Aegean* (n 20) para 399; see also *UA/CO* (n 20) 11 footnote 25 and 17 footnote 30. Although latter decisions were dealing with mergers the concept seems to be exactly the same.

155 *UA/US* (n 16) para 64; *AF/KLM* (n 19) 22 footnote 28; *DL/NW* (n 20) 10 footnote 21; *IB/BA* (n 20) paras 117 and 196.

156 *BA/IB/GB* (n 20) para 39: 'The Commission has so far not set definitive minimum O&D traffic thresholds below which competition restrictions on certain routes could be considered as falling outside the scope of Article [101(1)] for *de minimis* reasons.' Afterwards the Commission refers to the fact that it never challenged routes with less than 30 000 passengers.

157 Case C-226/11 *Expedia Inc* [2012] ECR not yet reported (*Expedia*), opinion of AG Kokott para 50.

an appreciable effect on trade between Member States'.[158] The same approach was adopted by the Court of Justice in the final judgement.[159] The appreciability criterion of the effect on trade test is satisfied in almost all cases. This contradicts any market size-based *de minimis* threshold.

6.2.3 Restriction of competition

In order to come under the scope of Article 101(1) TFEU, an agreement must have either the object or the effect of restricting competition. The meaning of restriction of competition has served as a crucial point for the enforcement and development of EU competition law particularly in the first decades of economic integration. By interpreting restriction of competition in an overly broad manner, the Commission was able to widen the application of EU competition law and exert a decisive influence over its development. Given the Commission's exclusive role in applying Article 101(3) TFEU under the old regime of Regulation 17,[160] it preserved its role of main protagonist in shaping EU competition law. The Commission used this method to 'develop its own view of what goals EU competition law should serve'.[161]

The Commission's White Paper on Modernisation provides some insights into this.[162] Although the Commission elucidated in the White Paper the reasons for centralised application of Article 101(3) TFEU, the broad interpretation of Article 101(1) TFEU served the same purpose by enabling the application of Article 101(3) TFEU.

According to the Commission, the system was 'necessary and proved very effective for the establishment of a "culture of competition" in Europe'. At a time when the primary objective was integration of national markets the Commission's approach enabled the establishment of a uniform application of competition rules and the promotion of market integration. Through the broad interpretation of restriction of competition, the Commission included many practices in its assessment that, based

158 ibid para 56.
159 *Expedia* (n 157) para 37.
160 EEC Council: Regulation No 17: First Regulation implementing Articles 85 and 86 of the Treaty [1963] OJ 013/204.
161 A Jones and B Sufrin, *EU Competition Law: Text, Cases and Materials* (4th edn OUP 2010) (Jones and Sufrin 2010) 193.
162 White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty [1999] OJ C132/1 para 4.

on a purely consumer welfare test, would not have qualified as a restraint.[163] The Commission tended to interpret any restriction on the parties' freedom as a restriction also on competition in the economic sense. As a result, the focus of substantive assessment became Article 101(3) TFEU. This approach is often called the jurisdictional interpretation of Article 101(1) TFEU.[164] The decentralised application of Article 101(3) TFEU solved the administrative difficulties arising from the jurisdictional approach; furthermore the internal market objective became less prominent in recent years as the main objectives were already achieved.

In addition to the jurisdictional interpretation in the early decades of EU competition law, the substantive meaning of the restriction of competition is said to be allocative inefficiency.[165] Odudu interprets the two methods of restricting competition as being when allocative inefficiency is measured or predicted (infringement by effect) or when it can be presumed (infringement by object).[166] According to the Commission guidelines on Article 101(3) TFEU an agreement restricts competition by effect when it affects actual or potential competition to such an extent that negative effects on prices, output, innovation or the variety or quality of goods and services on the relevant market can be expected with a reasonable degree of probability.[167] In short, whenever increased prices, decreased output or product quality can be measured, predicted or presumed Article 101(1) TFEU is infringed.

However, an agreement can comply with EU competition law in two ways regardless of the above interpretation of restriction of competition. Firstly, an agreement can completely avoid the scope of Article 101(1) TFEU provided it does not have as its object or effect the restriction of competition. Secondly, even if an agreement does infringe Article 101(1) TFEU, it can benefit from the legal exception under Article 101(3) TFEU through a block exemption regulation or individually by satisfying all four conditions of that provision.

Self-assessment, the decentralised application of EU competition rules since 2004

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163 See R Whish and D Bailey, *Competition Law* (7th edn OUP 2012) (Whish and Bailey 2012) 115-116; Jones and Sufrin 2010 (n 161) 192-195.

164 O Odudu, *The boundaries of EC competition law – the scope of Article 81* (OUP 2006) (Odudu 2006) 98-101.

165 ibid 102-103.

166 ibid 103.

167 Communication from the Commission, notice, guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/08 (Article 101(3) guidelines) para 24.

and the direct applicability of Article 101(3) TFEU have all substantially eroded the significance of what constitutes a restriction of competition.[168] Article 101 TFEU is applied in its totality, which makes undertakings indifferent with regard to the issues whether they infringed Article 101(1) TFEU but fulfilled the conditions of Article 101(3) TFEU or in alternative they did not violate Article 101(1) TFEU in the first place. Still this question can be decisive due to how the burden of proof is allocated in antitrust cases and the bifurcated nature of Article 101 TFEU.

Another level of interpretation of restriction of competition reveals the classification of conduct either as an object or effect restriction within the meaning of 'restriction of competition'. This question is already closely related to the main focus of this thesis. The Court of Justice emphasises from the outset that object or effect should be read disjunctively.[169] Accordingly, the alternative nature of these two requirements leads first to the inquiry of the object of the agreement. Only if this analysis does not reveal a restriction by object, should the inquiry be continued into the effects of the agreement. It also has the implication that 'in deciding whether an agreement is prohibited by Article [101(1) TFEU], there is therefore no need to take account of its actual effects once it appears that its object is to prevent, restrict or distort competition [...]'.[170] It is apparent that the distinction of infringement by object and infringement by effect has an important bearing on both the party alleging the infringement and the alleged infringer.

Both infringement by object and infringement by effect have been defined by case law. Within the group of restrictions of competition, the Union Courts have

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168 An undertaking may be indifferent as to whether it restricts competition and fulfills the four conditions of Article 101(3) TFEU or it does not restrict competition at all. A similar approach was advocated by the Court of Justice in case C-260/07 *Pedro IV Servicios SL v Total España SA* [2009] ECR I-2437 para 36: 'While it is indeed true that the block exemption regulations apply in so far as agreements contain restrictions on competition caught by Article [101(1) TFEU], it is nevertheless often more practical to ascertain first whether those regulations apply to a given agreement, in order to avoid – if those regulations do apply – a complex economic and legal assessment to determine whether the conditions for the application of Article [101(1) TFEU] are met'.

169 Case 56/65 *Société Technique Minière v Maschinenbau Ulm* [1966] ECR 235 (*STM*) 249. In case C-219/95 P *Ferriere Nord SpA v Commission* [1997] ECR I-4411 (see also T-143/89 *Ferriere Nord v Commission* [1995] ECR II-917) the issue raised was whether object and effect can be read as cumulative conditions, since the Italian version of the EC Treaty used 'and' instead of 'or' which was used in all other translations (see paras 12-16 of the judgment). The Court of Justice concluded that despite the apparent difference in the Italian text, the two requirements are alternatives.

170 eg Joined Cases 56/64 and 58/64 *Consten and Grundig v Commission* [1966] ECR 299, 342 or case T-199/08 *Ziegler SA v Commission* [2011] ECR not yet reported para 43.

highlighted certain types of conduct based on their nature and generally inimical attitude towards competition. These are infringements by object. Other conduct can be classified as infringements by effect. However, in practice defining a restriction of competition differs from this theoretical approach.

Case law establishes that an agreement has the object of restriction of competition when 'certain forms of collusion between undertakings can be regarded, by their very nature, as being injurious to the proper functioning of normal competition'.[171] In the same vein, the Court of Justice refers to the necessary consequence of the agreement being to restrict competition, since the very existence of a clause may create the undesired effects.[172] The General Court refers to 'obvious restrictions of competition such as price-fixing, market-sharing or the control of outlets' when it distinguishes between cases which require a full market analysis and those which do not.[173] In addition, assessing whether an agreement has an anticompetitive object involves taking account of both the precise object of the agreement and its economic and legal context.[174] AG Trstenjak considers this requirement a reason for defining the object restrictions more widely than simply an agreement which obviously restricts competition.[175] Similarly, the type of agreements listed by Article 101(1) TFEU (a)-(e) do not constitute an exhaustive list of restrictions by object.[176]

Accordingly, in *Beef Industry* the Court of Justice expressly rejected the argument that the category restriction by object should be strictly limited to conduct of which the anticompetitive effects are obvious. In *T-Mobile Netherlands*, the Court of Justice says that 'it is sufficient that [the agreement] has the potential to have a

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171 *Beef Industry* (n 136) para 17; case C-8/08 *T-Mobile Netherlands* [2009] ECR I-4529 (T-Mobile Netherlands) para 29;

172 See para 44 of AG Trstenjak's opinion in *Beef Industry* (n 136) and case 19/77 *Miller International Schallplatten v Commission* [1978] ECR 131, para 7.

173 *ENS* (n 90) para 136.

174 *Beef Industry* (n 136) para 15; *T-Mobile Netherlands* (n 171) para 27; C-403/08 and C-429/08 *Football* Association *Premier League* [2011] ECR not yet reported (*Premier League*) para 136; case C-439/09 *Pierre Fabre Dermo-Cosmétique SAS* [2011] ECR not yet reported (*Pierre Fabre*) para 35; case C-501/06 P *GlaxoSmithKline Services Unlimited v Commission* [2009] ECR I-9291 (*Glaxo*) para 58; joined cases 96/82 to 102/82, 104/82, 105/82, 108/82 and 110/82 *IAZ International Belgium and others v Commission* [1983] ECR 3369 para 25.

175 Para 47 of AG Trstenjak's opinion in *Beef Industry* (n 136): 'If not only the content of an agreement but also its legal and economic context must be taken into account, classification as a restriction of competition by object cannot depend on whether that object is clear at first sight or becomes evident only on closer examination of the circumstances and the intentions of the parties'.

176 Paras 48-49 of AG Trstenjak's opinion in *Beef Industry* (n 136) and para 23 of the judgment.

negative impact on competition. In other words [it] must be simply capable in an individual case, having regard to the specific legal and economic context, of resulting in the prevention, restriction or distortion of competition within the [internal] market'.[177] According to the Commission's approach, 'restrictions of competition by object are those that by their very nature have the potential of restricting competition'.[178] The Commission also clarifies that restrictions black-listed in block exemption regulations or identified as hard-core restrictions provide a non-exhaustive list of examples for object restrictions.[179] In contrast, the Court of Justice refuses even to use the term 'hard-core', arguing that neither the Treaty nor secondary sources use it.[180]

Infringements by object identified by case law include price fixing, market sharing, output restrictions, and exchange of sensitive pricing information.[181] These are the types of infringements most often dealt with in Commission cases, however, as established by the Union Courts, the list cannot be regarded as exhaustive, just because of that circumstance. When assessing whether any agreement has the object of restricting competition, 'close regard must be paid in particular to the objectives which it intended to attain'[182] and 'to the wording of its provisions'.[183] These latter two requirements demonstrate that it is not the subjective intention of any or all of the parties which determines how the agreement is classified, but rather the objective content and the meaning of its provisions.

The legal and economic context, as mentioned above, might be relevant for the final conclusions. For example, 'the way in which an agreement is actually implemented may reveal a restriction by object even where the formal agreement does not contain an express provision to that effect'.[184] According to AG Tizzano, 'the anti-competitive nature of an agreement may be deduced not only, obviously, from the

177 *T-Mobile Netherlands* (n 171) para 31.
178 Article 101(3) guidelines (n 167) para 21.
179 ibid para 23.
180 See *Pierre Fabre* (n 174) para 32. In its opinion in the same case AG Mazák concludes that 'hard-core' restriction as defined in the Commission's Guidelines on Vertical Restraints 'does not necessarily have the object or effect of restricting competition pursuant to Article [101 TFEU]'. See paras 27-30 of the AG's opinion. In the same opinion at para 24 the AG mentions the Commission's statement that a restriction by object and a hard-core restriction constitute two distinct legal concepts, while there may be links between them.
181 See eg *ENS* (n 90) para 136.
182 *T-Mobile Netherlands* (n 171) para 27.
183 *Beef Industry* (n 136) para 21.
184 Article 101(3) guidelines (n 167) para 22.

content of its clauses but also from a series of factors including, precisely, the intention of the parties as it arises from the "genesis" of the agreement and/or manifests itself in the "circumstances in which it was implemented" and in the "conduct" of the companies concerned'.[185] As a consequence, evidence of subjective intent is not a necessary condition; however, there is nothing to prevent the decision-maker from assessing this information and taking account of it.[186] Furthermore, the above circumstances also mean that 'an agreement may be regarded as having a restrictive object even if it does not have the restriction of competition as its sole aim but also pursues other legitimate objectives'.[187]

Whish elaborates the idea of thinking in terms of boxes: the 'object box' and 'effect box'.[188] The object box comprises particularly pernicious types of agreement. These agreements are generally harmful to consumers, therefore as a policy decision they may only be permitted if the four conditions of Article 101(3) TFEU are satisfied.[189] For the same reason it is not necessary to prove anti-competitive effects. The effect box comprises all other types of agreement and a full market analysis is required for Article 101(1) TFEU to apply. Odudu explains object restriction as those cases where allocative inefficiency can be presumed either inductively once there is sufficient experience of the conduct or based on intention.[190]

Bellamy and Child indicate that certain agreements 'of their nature' restrict competition (object restrictions), while others do not necessarily. Any other restriction of competition is based only on the circumstance (effect restrictions).[191] Faull and Nikpay refer to agreements that, prima facie, do not have significant beneficial effects but do have a high potential for negative effects.[192] They cite the provisions of the Article 101(3) guidelines and the definition based on negative experience with these types of practices. Goyder uses similar language when she

185 Case C-551/03 P *General Motors v Commission* [2006] ECR I-3173 (*General Motors*) para 78.
186 *T-Mobile Netherlands* (n 171) para 27.
187 *Beef Industry* (n 136) para 21; *General Motors* (n 185) para 64. As AG Tizzano put it in para 67 of his opinion in *General Motors*: 'neither the Treaty nor the case-law shows that, for there to be an infringement of Article [101 TFEU] by reason simply of the object of an agreement, that agreement must have a restriction of competition as its sole objective'.
188 Whish and Bailey 2012 (n 163) 120-121.
189 ibid 121.
190 Odudu 2006 (n 164) 113-125.
191 PM Roth and R Vivien, *Bellamy & Child European Community law of competition* (6th edn OUP 2008) para 2.076.
192 J Faull and A Nikpay, *The EC law of competition* (2nd edn OUP 2007) (Faull and Nikpay) para 3.153.

mentions that certain agreements are prima facie so likely to affect competition that this effect will be presumed.[193]

King, on the other hand, challenges the object box approach, arguing that it is more like a policy approach than a representation of the case law.[194] She argues for a more analytical approach to restrictions of competition which finds support in case law and avoids the straitjacketing of the object box approach. Mahtani offers a somewhat similar explanation when he describes restriction by object as more than the simple object box approach that applies rigid categorisation.[195]

If the above analysis of an agreement does not reveal a 'sufficient degree of harm to competition' then the effects should be considered as the next step, given the alternative nature of object and effect.[196] It is necessary that factors are present which show that competition has in fact been restricted to an appreciable extent.[197] In contrast to object cases, this requires a full market analysis where 'account should be taken of the actual conditions in which they produce their effects, in particular the economic and legal context in which the undertakings concerned operate, the nature of the products or services concerned, as well as the real operating conditions and the structure of the market concerned' which includes the issues of potential competition.[198]

A key element of the analysis is the counterfactual: the competition in question should be assessed within the actual context in which it would occur absent the agreement in dispute.[199] For these purposes the relevant market needs to be defined.[200] In essence the party alleging a restriction by effect has to demonstrate

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193 J Goyder and A Albors-Llorens, *Goyder's EC competition law* (5th edn OUP 2009) (Goyder 2009) 118.

194 S King, 'The object box: law, policy or myth?' (2011) 7 European Competition Journal 269 (King 2011).

195 MR Mahtani, 'Thinking outside the object box: an EU and UK perspective' (2012) 8 European Competition Journal 1 (Mahtani 2012).

196 See eg case T-360/09 *E.ON Ruhrgas AG and E.ON AG v Commission* [2012] ECR not yet reported (*E.ON*) para 141.

197 ibid; case T-328/03 *O2 (Germany) GmbH & Co OHG v Commission* [2006] ECR II-01231 (*O2*) para 68.

198 Case T-461/07 *Visa Europe and Visa International Service v Commission* [2011] ECR not yet reported (*Visa Morgan Stanley*) paras 67-68; *ENS* (n 90) paras 136-137. As to the details required for the assessment see also case C-234/89 *Stergios Delimitis v Henninger Bräu AG* [1991] ECR I-0935 (*Delimitis*) paras 14-30.

199 *STM* (n 169) 250; *Visa Morgan Stanley* (n 198) para 69; *O2* (n 197) para 68.

200 *Delimitis* (n 198) para 16.

appreciable negative effects on prices, output, innovation or the variety or quality of goods and services. These effects must be established with a reasonable degree of probability by examining existing and potential competition which involves consideration of the competition situation absent the agreement.

This type of analysis generally concentrates on the question of whether the parties to the agreement already have or would obtain 'some degree of market power' as a result of the agreement.[201] In certain cases, however, negative effects may be shown directly.[202] The burden of proof in demonstrating negative effects in these cases is on the party alleging the infringement. The other party, in contrast with object cases, has to raise efficiency arguments only where the negative effects are successfully proven and not simply presumed. This suggests that in the absence of market power, undertakings are unlikely to be found to have restricted competition. Odudu considers that allocative inefficiency can be either measured or predicted in effect cases with the help of economic tools.[203]

Consequently, Article 101(1) TFEU is applicable if an abbreviated inquiry into the restrictive nature of an agreement or the subsequent full market analysis reveals restriction of competition to an appreciable extent. The parties to the agreement can avoid the consequence of voidness under Article 101(2) TFEU only by benefitting from the legal exception under Article 101(3) TFEU.

6.2.3.1 The more economic approach in EU competition law

The discussion of the preceding section explained that the concept of restriction by object serves as a presumption, where conclusions are reached based on legal forms ('boxes') without a true economic analysis that would examine the exact effects. However, competition laws in general, and EU competition law in particular, seem increasingly influenced by the importance of economic analysis and the so-called 'more economic approach'.

Over the last 15 years the more economic approach has become a trend in all policy areas of EU competition law with widely differing effects. Differences can be found

201 Article 101(3) guidelines (n 167) para 25.
202 ibid para 27.
203 Odudu 2006 (n 164) 103-112.

both in the timing and depth of changes adopted - a process which is far from complete.[204] Consequently, one cannot offer a uniform definition of what is meant by the more economic approach applicable in all relevant areas of EU competition law. Nevertheless, when summarising the main characteristics of this process, the following distinctive features can be identified.

Firstly, the more economic approach implies a strengthened role of economic analysis in investigations and the increased use of sophisticated quantitative econometric techniques. Econometric data analysis is applied whenever possible, provided that the data sets needed are available. The Commission uses the best evidence available specific to each case.[205] This can lead to either the application of the full econometric arsenal,[206] or simply the use of qualitative evidence.[207] Despite the development of a more economic approach, competition authorities are limited by the evidence available. The enhancement of economic expertise within DG COMP has been a top priority since the term of Commissioner Mario Monti.[208]

Secondly, the more economic approach also means a departure from the legalistic form based assessment to an effects-based economic approach. This has often been described – erroneously – as moving away from the per se approach towards a rule of reason approach.[209] It is ultimately only those types of economic behaviour which actually, or are highly likely to produce detrimental effects on the market that should be prohibited. However, following thorough analysis, efficiency-enhancing competitive conduct should be allowed.

Finally, the more economic approach also represents a declared shift towards the

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204 For further reading on the more economic approach see eg D Schmidtchen, M Albert and S Voigt (eds), *The more economic approach to European competition law* (Mohr Siebeck 2007); J Drexl, W Kerber and R Podszun (eds), *Competition Policy and the economic approach* (Edward Elgar 2011).

205 Alexander Italianer, '"Quantity" and "quality" in economic assessment' (Charles River Associates Annual Conference, Brussels, 7 December 2011) 7.

206 *Ryanair/Aer Lingus* (n 20) 355-515 (Annex I and Annex II).

207 See *Olympic/Aegean* (n 20).

208 Mario Monti, 'A reformed competition policy: achievements and challenges for the future' (Center of European Reform Conference, Brussels, 28 October 2004) (Monti 2004) 6.

209 The per se/rule of reason distinction is a concept of US antitrust law, often referred to in relation to EU competition rules as well. Nevertheless, it would be misleading to use those terms with their original meaning as part of EU competition law. The significant differences between the two legal systems do not enable a direct adaptation. To that effect see R Whish and B Sufrin, 'Article 85 an the Rule of Reason' (1987) 7 Yearbook of European Law 12. See also the subsequent section '6.2.3.2.2 The comparison with the EU approach'.

protection of consumer welfare and consumer interests when applying competition rules.[210] It is therefore competition and not competitors that deserves protection.

The first application of the more economic approach, in terms of the normative rules applied, may be considered to have been the 1997 Commission Notice on the Definition of the Relevant Market.[211] This document covers both Articles 101 and 102 TFEU and merger cases and describe the methodology to be used when identifying the competitive constraints on market players. The document introduces techniques based on economic analysis such as the SSNIP test. The notice refers to economic problems such as the cellophane fallacy and highlights various quantitative techniques that can be used. The more economic approach was developed further with regard to the different aspects of EU competition law as described below.[212]

6.2.3.1.1 Restrictive agreements

In 1999, the Commission radically overhauled the relevant rules on vertical restraints with the adoption of Commission Regulation 2790/99.[213] This block exemption regulation functioned as a prototype for all subsequent new-style regulations. Earlier block exemption regulations were extremely rigid with regard to possible content.[214] They contained so-called 'white clauses' which had to be included, and so-called 'black clauses' which were prohibited. This practice distorted the content of agreements and had a straight-jacket effect on them.

In contrast, the new block exemption regulation lists only those provisions which are

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210 Monti 2004 (n 208) 3.

211 Market definition notice (n 2). See a critique of the notice in the light of the more economic approach in RJ Van den Bergh, 'Achilles uncovered: revisiting the European Commission's 1997 market definition notice' (2002) 44 Antitrust Bulletin 143; RJ Van den Bergh and PD Camesasca, *European Competition Law and Economics* (2nd edn Sweet & Maxwell 2006) 125-130.

212 The changes in EU state aid policy will not be discussed here. See eg A Bartosch, 'Der "More Economic Approach" in der Entscheidungspraxis der Europäischen Kommission in Beihilfesachen' (2007) 53 Recht der internationalen Wirtschaft 681; T Jaeger, 'Systemfragen des More Economic Approach im Beihilferecht' (2008) 58 Wirtschaft und Wettbewerb 1064.

213 Commission Regulation (EC) 2790/1999 of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices [1999] OJ L336/21. See also Commission notice - Guidelines on Vertical Restraints [2000] OJ C291/1.

214 eg Commission Regulation (EEC) 1983/83 of 22 June 1983 on the application of Article 85 (3) of the Treaty to categories of exclusive purchasing agreements [1983] OJ L173/5; Commission Regulation (EEC) 1984/83 of 22 June 1983 on the application of Article 85 (3) of the Treaty to categories of exclusive purchasing agreements [1983] OJ L173/1.

prohibited (black list) and provides the necessary freedom for the parties to decide the terms of their agreement. The regulation therefore introduced a more effects-based approach. In principle, where their market share does not exceed 30% (a threshold set by the Regulation), the parties are free to choose the form and provisions of their cooperation aside from clauses on the black list. It is deemed that no anticompetitive effects can be produced below that threshold. Following the 2010 revision of the Regulation, the general approach remained unchanged and further refinements were introduced based on economic thinking, eg in relation to resale price maintenance.[215]

Following the reform of vertical restraints, the Commission continued in a similar vein in reforming horizontal agreements by providing more freedom for the undertakings, and placing greater emphasis in the assessment on market power.[216] In subsequent years, the regulations on car distribution[217] and technology transfer[218] were adjusted in the same manner, completing the adoption of a more economic approach with regard to restrictive agreements.

Game theoretical insights on the functioning of anticompetitive cartels have also

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215 Commission Regulation (EU) 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices; Commission notice - Guidelines on Vertical Restraints [2010] OJ C130/1 (vertical guidelines).

216 Commission Regulation (EC) 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements [2000] OJ L304/3; Commission Regulation (EC) 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements [2000] OJ L304/7; Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements [2001] OJ C3/2; No significant change was made in the 2010 review either, see: Commission Regulation (EU) 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the functioning of the European Union to categories of research and development agreements [2010] OJ L335/36; Commission Regulation (EU) 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty to categories of specialisation agreements [2010] OJ L335/43; Communication from the Commission - Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1.

217 Regulation (EC) 1400/2002 of 31 July 2002 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices in the motor vehicle sector [2002] OJ L203/30; Commission Regulation (EU) 461/2010 of 27 May 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices in the motor vehicle sector [2010] OJ L129/52; Supplementary guidelines on vertical restraints in agreements for the sale and repair of motor vehicles and for the distribution of spare parts for motor vehicles [2010] OJ C138/16.

218 Commission Regulation (EC) 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements [2004] OJ L123/11.

provided a basis for elaborating the EU leniency policy[219] and settlement procedures in recent years.[220] The reform of EU procedural rules enabled the Commission to focus on hard-core cartels and serious abuses of dominant position, those infringements of competition law which represent a real threat to consumer welfare.[221] All these changes were driven by the desire to implement the more economic approach and focused on both the protection of consumer welfare and effect instead of form.

6.2.3.1.2 Merger control

In relation to merger control, the more economic approach only became more evident somewhat later in the early 2000s. Three consecutive and embarrassing court defeats forced a significant refocus of the Commission's attitude towards economic analysis in merger cases. Within a few years, the Commission had prohibited the transactions of *Airtours/First Choice*,[222] *Schneider/Legrand*,[223] *Tetra Laval/Sidel*[224] and *GE/Honeywell*.[225] In the first three cases, the General Court reversed the prohibition decisions of the Commission and delivered harsh critiques of the economics applied by the Commission and how these mergers were treated. In the fourth case, *GE/Honeywell*, the General Court upheld the prohibition decision, although it annulled the Commission's main argument of the decision on conglomerate effects.

These judgments had far-reaching consequences. They led to substantial changes in the internal organization of DG COMP and the applicable substantive rules. In 2003,

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219 2006 Commission notice on immunity from fines and reduction of fines in cartel cases [2006] OJ C298/17; 2002 Commission notice on immunity from fines and reduction of fines in cartel cases [2002] OJ C45/3; 1996 Commission Notice on the non-imposition or reduction of fines in cartel cases [1996] OJ C2074.

220 Commission Regulation (EC) 622/2008 of 30 June 2008 amending Regulation (EC) 773/2004 as regards the conduct of settlement procedures in cartel cases [2008] OJ L171/3; Commission Notice on the conduct of settlement procedures in view of the adoption of Decisions pursuant to Article 7 and Article 23 of Council Regulation (EC) 1/2003 in cartel cases [2008] OJ C167/1.

221 Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1 (Regulation 1/2003).

222 Airtours/First Choice (n 133); appealed before the CFI: case T-342/99 [2002] ECR II-2585.

223 *Schneider/Legrand* (Case COMP/M.2283) Commission Decision 2004/275/EC [2004] OJ L101/1; appealed before the CFI: case T-310/01 [2002] ECR II-4071.

224 *Tetra Laval/Sidel* (Case COMP/M.2416) Commission Decision 2004/124/EC [2004] OJ L43/13; appealed before the CFI: case T-5/02 [2002] ECR II-4381.

225 *General Electric/Honeywell* (Case COMP/M.2220) Commission Decision 2004/134/EC [2004] OJ L48/1; appealed before the CFI: case T-209/01 [2005] ECR II-5527 and T-210/01 [2005] ECR II-5575 (*GE/Honeywell*).

the Commission created the position of the Chief Economist to provide expert opinion with the help of his staff on the economics used in Commission procedures.[226] An internal peer review system has also been created to provide the necessary counterbalance to the views of case teams.

In 2004, a new merger regulation was adopted at the same time as the enlargement of the EU.[227] The new regulation replaced the earlier used dominance test with the 'significant impediment of effective competition' test as the applicable substantive test. The new test meant that dealing with problems such as non-collusive oligopoly became easier compared to the previous dominance test.[228] The Commission also adopted guidelines in the area of merger policy. The horizontal and subsequent non-horizontal guidelines deal in detail with merger appraisal, the assessment of non-coordinated (unilateral) and coordinated effects and the possibilities of an efficiency defence.[229] The guidelines incorporate current economic thinking and were prepared in the spirit of the more economic approach.

6.2.3.1.3 Abuse of dominant position

Unsurprisingly, the more economic approach has only recently influenced the application of Article 102 TFEU. In the absence of secondary legislation in this area, the Commission is far less able to implement radical changes in how the Treaty rules are applied. In addition, the Union Courts, bound by previous jurisprudence, exert considerably more influence on the direction the case law should take than in other areas.[230]

In December 2005, the Commission published its 'Discussion Paper on exclusionary abuses by dominant firms'.[231] Although this was only a working paper without firm official conclusions, it already showed the Commission's clear openness toward the

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226 See Mario Monti, 'EU competition policy' (Fordham Annual Conference on International Antitrust Law & Policy, New York, 31 October 2002) 5-7.

227 EUMR (n 138).

228 See eg *T-Mobile Austria/Tele.ring* (Case COMP/M.3916) Commission Decision 2007/193/EC [2007] OJ L88/44.

229 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5 (horizontal merger guidelines); Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6.

230 Whish and Bailey 2012 (n 163) 176.

231 Available at: <http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf> accessed 31 December 2012.

effects-based approach and applied the consumer welfare standard.[232] Given the limited room for manoeuvre described above, the whole exercise started in 2005 culminated in the adoption of the 'Guidance on the Commission's enforcement priorities in applying Article [102] of the [TFEU] to abusive exclusionary conduct by dominant undertakings' in 2009.[233] In line with the general trend, the more economic approach tends to emphasize the potential or actual effects of dominant undertakings' behaviour, thereby allowing business decisions which do not decrease consumer welfare.

The fact that both documents promote protection of consumer welfare and the competitive process rather than competitors, can be interpreted as a significant step towards a more economic approach. This is arguably true even if the Discussion Paper or the Guidance Paper are considered merely as Commission documents which set out DG COMP's unofficial thoughts or priorities in relation to the enforcement of Article 102 TFEU. Ultimately, it remains the duty of Union Courts to decide whether the infiltration of a more economic approach in other areas of competition law also justify a paradigm shift concerning Article 102 TFEU. However, what can be clearly established at present is the signal from the Commission that it is open to changes and ready to move in the direction of a more economic approach. There are signs that Union Courts may also take a similar view.[234]

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232 In paragraph 54 of the Discussion Paper the Commission states that 'the essential objective of Article [102] when analysing exclusionary conduct is the protection of competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources'.
In paragraph 55 the Commission continues: 'Article [102] prohibits exclusionary conduct which produces actual or likely anticompetitive effects in the market and which can harm consumers in a direct or indirect way. The longer the conduct has already been going on, the more weight will in general be given to actual effects'.

233 Communication from the Commission - Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7.

234 In case C-209/10 *Post Danmark* [2011] ECR not yet reported, the Court of Justice says in para 21 that 'It is in no way the purpose of Article [102 TFEU] to prevent an undertaking from acquiring, on its own merits, the dominant position on a market […]. Nor does that provision seek to ensure that competitors less efficient than the undertaking with the dominant position should remain on the market'. In para 22 it continues: 'Thus, not every exclusionary effect is necessarily detrimental to competition […]. Competition on the merits may, by definition, lead to the departure from the market or the marginalisation of competitors that are less efficient and so less attractive to consumers from the point of view of, among other things, price, choice, quality or innovation'. The Court of Justice also establishes in para 30 that 'the fact that the practice of a dominant undertaking may […] be described as "price discrimination", […] cannot of itself

6.2.3.2 Administrability of efficient antitrust enforcement system

The more economic approach aims to improve the overall efficiency of the enforcement system of EU competition law. It should contribute to better decisions that capture more precisely the realities of the marketplace. An efficient enforcement system can actually achieve the goals of competition law, protect competition and encourage competitive behaviour even among dominant undertakings. Consequently consumer welfare can be enhanced and the efficient allocation of resources ensured. Furthermore, anticompetitive conduct should be discouraged and punished to maintain the benefits of competition and to achieve an optimal level of deterrence for the business community. It is important to understand how the design and enforcement practice of competition provisions influences their administrability and the efficiency of the system as a whole. Why would the more economic approach contribute to these goals.

In theory, decision-makers can commit two types of error. Firstly, they can prohibit behaviour that is pro-competitive and beneficial for consumers. This is a 'false positive', or 'type I' error. Secondly, they can falsely permit behaviour that produces harmful effects on the market, which is called a 'false negative' or 'type II' error. These failures can be illustrated by the following diagram:

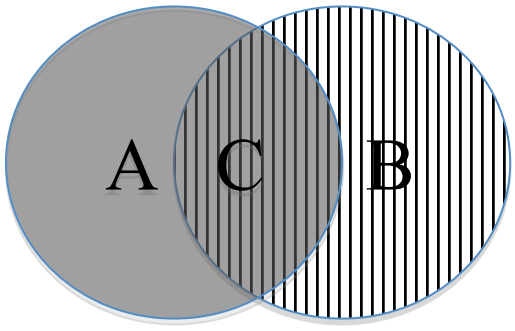

Figure 6.1 Errors of competition law enforcement[235]

suggest that there exists an exclusionary abuse'. The opinion of the Court of Justice seems to be entirely aligned with the Commission Guidance Paper and the more economic approach it represents.

[235] Based on FS McChesney, 'Easterbrook on errors' (2010) 6(1) Journal of Competition Law &

The light grey circle 'A' represents conduct which can be said to be anticompetitive. The vertically hatched circle 'B' symbolises conduct which competition authorities identify as anticompetitive. In an ideal world the two circles would be congruent and only truly anticompetitive conduct would be subject to antitrust scrutiny. The overlapping area of 'C' should therefore be maximised. The area of 'B' without area 'C' represents false positives, ie those errors where enforcers punish competitive behaviour of undertakings. Area 'A' without 'C' indicates false negatives, ie conduct that escapes the censure of competition authorities. The size of the error areas A and B can vary and obviously not always equals. The institutional background of enforcement, the design of the competition rules applied, and the standard of proof can all influence the outcome.

An enforcement system which relies heavily on a judiciary system and strong precedents may have a tendency towards false positives. Courts in general may be less open to the economic arguments often raised in antitrust cases, therefore legal formalism may prevail over case-by-case assessment and countless economic debates. Similarly, form-based competition rules that focus less on the actual effect may also increase the proportion of false positives. On the other hand, a high standard of proof that requires significantly more than the 'balance of probabilities' being satisfied on a case-by-case basis, may favour the defendant undertakings and increase the number of false negatives.[236] A high proportion of unlawful conduct might escape prohibition due to the failure of parties alleging an infringement to provide the necessary amount of evidence required by the standard of proof.

In theory, the aim of the more economic approach is to reduce the number of false positives by relying on current economic thinking. It should focus investigations only on those cases where anticompetitive harm occurs without any increase in efficiency. At the same time the more complex nature of investigations should not increase the number of false negatives. The net effect should be an improvement of the enforcement system that contributes to consumer welfare.

In spite of the foregoing, decision-makers cannot avoid errors completely in applying competition rules even with a more economic approach. This is due in part

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Economics 11 (McChesney 2010) 14.

[236] McChesney 2010 (n 235) 15.

to the fact that enforcement of competition rules occurs in an uncertain environment and that authorities inevitably operate with imperfect information and at significant costs. As Easterbrook says, 'the costs of action and information are the limits of antitrust'.[237] An optimal enforcement system would take account of these limitations. An optimal enforcement system 'should be designed to minimize the total costs of (1) anticompetitive practices that escape condemnation; (2) competitive practices that are condemned or deterred; and (3) the system itself'.[238]

It has been considered that competition law should be connected to economic thinking and that the design of legal concepts in this area of law should build on sound economic theory. Furthermore, it has been considered that competition law should 'perfect the operation of competitive markets'.[239] However, this requirement poses its own difficulties. 'Efforts to improve markets through law aim at a moving target, with a paradox: if an economic institution survives long enough to be studied by scholars and stamped out by law, it probably should be left alone, and if an economic institution ought to be stamped out, it is apt to vanish by the time the enforcers get there'.[240] The basic characteristics of economic analysis are often in conflict with how law works.

Economic analysis necessitates large amounts of data and time to produce results, which in the end may often produce nothing more than estimates of probabilities.[241] Economic experts may disagree about these results, and some even say that 'any competent economist can construct a model showing that almost any practice injures consumers when certain assumptions hold'.[242] Furthermore, the analysis necessarily involves assumptions since a global inquiry invites no answers.[243] Econometric tools and techniques should not give a false sense of complete accuracy and precision. However, improvements resulting from the more economic approach are not called into question, as decision-making retains the potential for errors, uncertainty and

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237 FH Easterbrook, 'The limits of Antitrust' (1984) 63(1) Texas Law Review 1 (Easterbrook 1984) 4.

238 ibid 16.

239 ibid 1. Market integration is another goal of EU competition law. For the purposes of the topic of this thesis, nevertheless, there is no need to discuss any potential conflict between the different goals of EU competition law.

240 FH Easterbrook, 'Ignorance and antitrust' in TM Jorde and DJ Teece (eds), *Antitrust, Innovation, and Competitiveness* (OUP 1992) 119 (Easterbrook 1992).

241 ibid 120.

242 ibid 121.

243 Easterbrook 1984 (n 237) 11.

imprecision.[244]

Given the above limitations of antitrust enforcement, authorities nevertheless must deal with the costs of potential errors and the costs of managing or avoiding them. It seems obvious that errors cannot be eliminated. Legislators and authorities have to make a conscious choice between 'favouring' false positives or false negatives. Easterbrook clearly prefers false negatives over false positives. In his opinion, if we know little about the effects of a practice, it should be excused, since most of the cooperations are beneficial.[245] In other words, when most of the examples in a category prove to be pro-competitive, searching for a few anticompetitive examples is not cost-effective.

Easterbrook also considers it more likely that a false negative is more self-correcting than a false positive.[246] In his opinion, monopoly prices, that arise from falsely acquitted collusion, attract entry, thereby stimulating competition. However, practices condemned as illegal are less likely to be reviewed by courts in the short-term. Finally, it has been considered that the costs of a false positive equal the potential reduction of the production cost of all units of the output, while false negatives concern only part of the monopolist's output.[247]

Evans and Padilla examine error costs in relation to excessive pricing in dynamic industries.[248] The cost of false positives is represented by the loss of consumer welfare resulting from the foregone investment into innovation and new products.[249] They also find the error cost of false negatives small due to the absence of barriers to entry in these industries.[250] It is generally true that US courts and authorities seem to be less concerned by false negatives.[251]

Joskow proposes a transaction cost approach to error costs.[252] Accordingly,

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244 K Heyer, 'A world of uncertainty: economics and globalization of antitrust' (2004-2005) 72 Antitrust Law Journal 375 (Heyer 2004) 378.

245 Easterbrook 1984 (n 237) 15.

246 ibid.

247 ibid 16.

248 DS Evans and AJ Padilla, 'Excessive prices: using economics to define administrable legal rules' (2005) 1 Journal of Competition Law and Economics 97.

249 ibid 114.

250 ibid 115.

251 See eg *Verizon Communications Inc v Law Offices of Curtis Trinko LLP* 540 US 398 (2004) 414.

252 PL Joskow, 'Transaction cost economics, antitrust rules, and remedies' (2002) 18(1) Journal of

enforcement institutions should take account of transaction costs in their efforts. This primarily includes the costs associated with the responses made by firms and the market in general to antitrust rules defined in cases.[253] Heyer adopts an expected value approach, whereby decision-making is influenced by the probability of a particular error and the size of the error cost involved.[254] He considers that taking greater and more explicit account of uncertainty would result in more accurate decisions.[255] Beckner III and Salop use a decision theoretic approach to offer a solution to decision-making with limited information.[256]

The question therefore arises of how to design competition law rules and enforcement mechanisms which take account of the above limitations. One extreme solution may be a system which relies on detailed case-by-case assessment and economic analysis to identify actual effects of each individual case. This would mean that at first glance, we may feel confident that the number of false positives are actually kept to a minimum. This would be achieved to the extent allowed by the 'precision' of economic theory. Law enforcement would identify only behaviour which current mainstream economic thinking considers harmful to consumer welfare.

This may be true at least at the level of specific cases. In practice, however, this would be either impossible to implement or only possible at prohibitively high costs. Pursuing detailed economic analysis in each and every case, especially in relation to cartels, would not result in significantly more accurate decisions. In addition, the process would be highly complex, increasingly expensive and to the same extent unpredictable.

Unpredictability arising from a case-by-case approach would impose higher costs not so much in the particular case under investigation but rather from the legal uncertainty which would result for the business community in general. Legal uncertainty created by complex rules renders it difficult for undertakings to know in advance whether their planned business behaviour complies with competition

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Law, Economics and Organization 95.

253 ibid 97.

254 Heyer 2004 (n 244).

255 ibid 386.

256 CF Beckner III and SC Salop, 'Decision theory and antitrust rules' (1999-2000) 67 Antitrust Law Journal 41 (Beckner III and Salop).

rules.[257] Undertakings may be deterred from competing on the merits just to avoid difficulties if they do not know the exact limits of legal and illegal conduct, or the definition of 'normal' competition. This may lead to the paradox that competition law itself acts as a deterrent to competition.[258] This would produce the same effect as a false positive, even without the actual application of competition rules. Certain pro-competitive conduct would disappear from the market by the application of competition rules.

At the same time, case-by-case assessment may also produce false negatives. The requirement of and extreme difficulty in demonstrating actual effects as part of a lengthy economic analysis may deter complainants or authorities from challenging illegal conduct. They may also be discouraged by the prospect of endless debates between economic experts. These consequences would be equally undesirable.

The other extreme design of legal rules and enforcement involves a strictly formalistic and prescriptive approach, where case-by-case economic analysis does not play a significant role. However, a formalistic approach would clearly offer the advantage of legal certainty. Undertakings could easily identify the limits of legal and illegal activities at relatively low-costs and without the need for detailed economic assessment. The administrative costs of operating the system would be limited due to the simplicity of competition rules. A formalistic approach necessarily entails some categorisation of anticompetitive conduct, which also simplifies how the rules are applied.

Formalism and categorisation may result in false positives, since categorisation necessarily includes exceptions, where actual effects are absent. Complainants or competition authorities may easily prove infringements of competition rules. The error cost of false positives may prove substantial both in specific cases and in general. Undertakings would be forced to align their conduct with formalistic rules without paying any attention to the realities of the market.

Although both of the above extremes offer some advantages, overall, neither

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257 A Christiansen and W Kerber, 'Competition policy with optimally differentiated rules instead of "per se v rules of reason"' (2006) 2 Journal of Competition Law & Economics 215 (Christiansen and Kerber).

258 See Whish and Bailey 2012 (n 163) 193 in relation to the same issue and Article 102 TFEU.

provides an administrable system where the total cost of to some extent inevitable false positives and false negatives are kept to a minimum. The ideal solution may differ from jurisdiction to jurisdiction depending on the characteristics of the legal system concerned, the development phase of the competition law regime in question and the institutional background of the enforcement authorities. For example, Arthur defines the following criteria for a workable legal standard: (1) consistent enforcement; (2) no overly broad definition; (3) minimising error cost; (4) the standard should be within the institutional competence of the decision-maker; and (5) applicable at reasonable expenses.[259]

An administrable and efficient enforcement system combines the elements of these two extremes, and apply a flexible approach to suit the characteristics of different categories of potentially illegal conduct. Such a system would require a detailed economic assessment only in a limited number of cases, where it can be expected that the thorough analysis may be decisive at the level of the individual case. In other cases, the system should apply filters, presumptions and informational shortcuts to preserve administrative or judicial efforts, and avoid losses in procedural efficiency and the costs of unnecessarily detailed investigations.[260] Ideally, these filters, presumptions and informational shortcuts are elaborated on the basis of mainstream economic thinking and the general experience of particular types of business behaviour. They should work as generalised conclusions of economics.

The allocation of the burden of proof, and the standard of proof required should reflect the authority's perception and evaluation of potential false positives and negatives. The way the system is constructed is a policy matter.[261] Authorities can avoid in this way most of the pitfalls of categorisation and the errors associated with legal formalism. A solution like this contributes to the administrative efficiency of enforcement, while preserving the benefits of economic analysis.

Various jurisdictions provide different answers for these issues in the light of their approach to competition policy, but they all face similar problems. Although the

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259 TC Arthur, 'A workable rule of reason: a less ambitious antitrust role for the federal courts' (2000-2001) 68 Antitrust Law Journal 377 (Arthur 2000) 340-341.

260 See also Christiansen and Kerber (n 257) 235-240.

261 See D Bailey, 'Presumptions in EU competition law' (2010) 31 European Competition Law Review 362 (Bailey 2010).

experiences of the US and the EU are markedly different, certain comparisons can provide useful insights for the purposes of the thesis question discussed in this work. Therefore in the following section the per se versus rule of reason and object versus effect distinctions will be presented and discussed.

6.2.3.2.1 The US experience

Section 1 of the Sherman Act establishes that 'every contract combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal'.[262] This provision was further developed by case law. The conceptual framework developed by courts in the first half of the 20th century and dominant until the 1970s-1980s was characterised by the dichotomy of the per se and rule of reason approaches. Courts clarified that the text of Section 1 should not be interpreted in its literal sense and certain restraints can escape its scope.

In *Standard Oil v the United States*, the US Supreme Court distinguished 'undue' or 'unreasonable' restraints, and held that only those restraints should fall within the scope of the general prohibition of Section 1.[263] It defined the test to be applied in rule of reason cases in *Chicago Board of Trade*:[264]

> 'The true test of illegality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition. To determine that question the court must ordinarily consider facts peculiar to the business to which the restraint is applied: its condition before and after the restraint was imposed; the nature of the restraint and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts.'[265]

This standard requires a fully-fledged economic analysis of all the circumstances surrounding a conduct, where the party alleging the infringement almost never

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262 15 USC § 1.
263 *Standard Oil Co of New Jersey v United States* 221 US 1 (1911).
264 *Chicago Board of Trade v United States,* 246 US 231 (1918).
265 ibid 238.

wins.[266] Rule of reason cases are considered expensive, lengthy and uncertain in their outcome.[267] Consequently, these cases are often viewed as per se legal[268] and a defendants' paradise.[269]

The above difficulties with the applicable test, and the experience gained with certain categories of agreements over the years led the Supreme Court to develop the per se rule in a series of cases.[270] Under the per se approach, certain conduct may be condemned without the need for elaborate economic analysis, or demonstrating actual effects. Once a certain amount is known about a practice, judgement on its legality can be made without further inquiry into the details.[271] The parties to the agreement cannot argue a lack of restriction of competition. The infringement is established simply by proving the existence of an agreement belonging to a category prohibited per se. The investigation into the details of a case is cut off at a relatively early stage based on experience with the type of conduct.

The reasoning offered by the Supreme Court for this provides that as certain agreements aim for and result in the elimination of competition, they 'may well be held to be in themselves unreasonable or unlawful, without the necessity of minute inquiry whether a particular price is reasonable or unreasonable as fixed […]'.[272] The 'pernicious effect on competition and the lack of any redeeming virtue are conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm [the agreements] have caused or the business excuse for their use'.[273] The Supreme Court clearly refers to the 'incredibly complicated and prolonged economic investigation […] so often wholly fruitless when undertaken'.[274] Accordingly, it explains that while 'cases that do fit the

266 S Calkins, 'Calfornia Dental Association: not a quick look but not the full monty' (1999-2000) 67 Antitrust Law Journal 495 (Calkins 1999).
267 TA Piraino Jr, 'Making sense of the rule of reason: a new standard for Section 1 of the Sherman Act' (1994) 47 Vanderbilt Law Review 1753 (Piraino 1994).
268 ibid 1761 and footnote 49.
269 Calkins 1999 (n 266) 521.
270 See *United States v Trenton Potteries Co* 273 US 392 (1927) (*Trenton Potteries*); *United States v Socony-Vacuum Oil Co* 310 US 150 (1940); *Northern Pacific Railway Co v United States*, 356 US 1 (1958) (*Northern Pacific*). As to the history of the rule of reason and per se approach, see Arthur 2000 (n 259) 341-371.
271 H Hovenkamp, *Federal antitrust policy: the law of competition and its practice* (West 2005) (Hovenkamp 2005) 255.
272 *Trenton Potteries* (n 270) 397.
273 *Northern Pacific* (n 270) 5.
274 ibid.

generalization may arise but a per se rule reflects the judgement that such cases are not sufficiently common or important to justify the time and expense necessary to identify them'.[275] The application of the per se prohibition predominated for several decades, but has been challenged and continuously reduced over recent decades.[276]

These two approaches in their original form may be at tension due to the administrative costs of the rule of reason approach and the error risk of the per se approach.[277] The sharp distinction between the per se and the rule of reason approaches has provoked extensive debate since the 1970s expressly because of the costs of the system.[278] The per se approach is considered too arbitrary, and the rule of reason too ambiguous.[279] This is precisely the issue highlighted by the above discussion of an administrability.

The courts and authorities which recognised this difficulty tried to adopt more structured approaches to capture the benefits and avoid the pitfalls of the dichotomy system. Since the late 1970s the Supreme Court has decided several cases where it acknowledged the limitations of the dichotomy model and offered alternatives between the two extremes. For example, *National Society of Professional Engineers*,[280] *NCAA v Board of Regents*,[281] or *Indiana Federation of Dentists*[282] are all regarded as providing examples of approaches that do not apply the rule of reason in full, but nevertheless allow analysis beyond the formalism of the per se approach.

The different variations often referred to as 'quick look', 'abbreviated', 'truncated', 'structured', or 'flexible' rule of reason and share the characteristics of applying filters, presumptions or shortcuts to avoid full-blown economic analysis. The factors taken into account include the nature of the conduct, the intent of the parties, market power, potential efficiencies or how compelling the theory of harm is.[283] Depending

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275 *Continental TV Inc v GTE Sylvania Inc* 433 US 36, 50 (1977) (*Sylvania*).

276 See in particular the judgments of *Leegin Creative Leather Products, Inc v PSKS, Inc*, 127 S. Ct. 2705 (2007); *State Oil v Khan*, 522 US 3 (1997); *NW Wholesale Stationers v Pac Stationery,* 472 US 284 (1985); *NCAA v Board of Regents,* 468 US 85 (1984) (*NCAA*); *Sylvania* (n 275).

277 WK Tom and C Pak, 'Towards a flexible rule of reason' (2000-2001) 68 Antitrust Law Journal 391 (Tom and Pak), 393-394.

278 E Gellhorn, WE Kovacic and S Calkins, *Antitrust law and economics in a nutshell* (5th edn Thomson West 2004) (Gellhorn 2004) 222-223.

279 Piraino 1994 (n 267) 1767.

280 *National Society of Professional Engineers v US* 435 US 679 (1978).

281 *NCAA* (n 276).

282 *FTC v Indiana Federation of Dentists* 476 US 447 (1986).

283 See Tom and Pak (n 277) 425.

on the test, efficiency arguments may receive attention first, while in other cases the focus is on market power or harm.[284] Areeda and Turner identify three variations of the summary approach of the rule of reason: 'almost instantaneous balancing' made in the 'twinkling of an eye', 'facial unreasonableness' and 'categorical or presumptive rules'.[285]

In its judgment in California Dental Association, the Supreme Court rejects the quick look approach and tries to differentiate the case from the aforementioned judgments.[286] In fact, the Supreme Court took pains to emphasise that an infringement can be found even without exhaustive economic inquiry.[287] It states that the 'categories of analysis are less fixed than terms like "per se", "quick look", and "rule of reason" tend to make them appear'.[288] As the Supreme Court says by quoting Areeda: 'there is always something of a sliding scale' and 'what is required is […] an inquiry meet for the case, looking to the circumstances, details, and the logic of a restraint'.[289] This latter approach does not contradict the improved approach abandoning the strict per se versus rule of reason dichotomy. Rather, it considers the per se and rule of reason restrictions as points along a continuum, where the detail of information and necessary assessment depends on the circumstances of the case. In certain cases the inquiry ends at a relatively early stage, while other cases involve more elaborate assessment.

The literature on the per se versus rule of reason distinction has long advocated a similar sliding scale approach with filters and presumptions. One of the most notable alternatives was proposed by Areeda and Turner.[290] It involves an approach with a set of propositions and questions to be answered instead of the misleading per se/rule of reason dichotomy.

In the first step it has to be answered whether the restraint can be regarded as very serious without recognised redeeming virtues. The next step involves identifying justifications of the kind which, at the level of arguments alone, appear to be

284 Beckner III and Salop (n 256) 67.
285 P Areeda, DF Turner and H Hovenkamp, *Antitrust Law, an analysis of antitrust principles and their application* (Aspen Law & Business 1998) (Areeda Hovenkamp) ¶1508, 403-408.
286 *California Dental Association v FTC* 526 US 756 (1999) (*CDA*).
287 Gellhorn 2004 (n 278) 261.
288 *CDA* (n 286) 22.
289 ibid 23-24.
290 Areeda Hovenkamp (n 285) ¶1511, 427-430.

legitimate in principle. If the case satisfies the criteria at this stage, the magnitude of the restraint is examined. This element can be fulfilled by showing proof of actual effects, or by proving market power as a surrogate. Proof of actual effects or significant market power triggers the other party's obligation to demonstrate in detail the efficiencies achieved by the restraint. The party alleging the restriction has the burden of proving that the efficiencies can be achieved by a significantly less restrictive alternative. Should it fail to do so, and the practice in question produces both benefits and anticompetitive harm, the court is required to balance these two opposing effects.

The analysis can end after any step of the process if the party bearing the burden of providing the adequate answer is unable to do so. Those cases which end after a few steps can be regarded as per se, while the ones requiring all or most of the steps in the process fit the rule of reason approach.[291] It is important to understand that per se and rule of reason are more like elements within the same spectrum than a sharp dichotomy. This approach allows more than just the two extremes: in the words of the Supreme Court, it is more like a sliding scale.[292]

In this system there can be shortcuts, and there is no need to go through all the elements sequentially.[293] For example, if the answer at one step is inconclusive and another can be more decisive then that can be examined instead. The process should be characterised by the shift back and forth between the parties of the burden of proof depending on the general assessment and the view of the issue in question.[294] The inherent difficulty to know what would have happened had the practice not been adopted warrants the use of presumptions and the allocation of the burden of proof based on the plausibility of the claim.

Presumptions should favour the general experience with the type of conduct, while the burden of proof should be on those arguing against it.[295] This should reflect the policy decision about how the enforcement system deals with uncertainty and the

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[291] Hovenkamp 2005 (n 271) 260.

[292] Of course, usually parties have their interest in arguing for the two extremes. The per se approach minimises the evidentiary burden for the party alleging the infringement, while the rule of reason approach maximises the chances to prevail of the party complained of (see Areeda Hovenkamp (n 285) ¶1511, 427).

[293] Hovenkamp 2005 (n 271) 261.

[294] ibid 267.

[295] ibid.

cost implications of a potential case-by-case assessment. Cases might differ as to which elements of competition analysis gain significance. In certain cases the harm appears obvious and requires strong arguments for efficiencies; while in other cases the benefits appear clear so harm would be plausible only with significant market power. Different steps of the assessment therefore prove to be crucial.

Easterbrook proposes a similar approach. He argues for presumptions that structure antitrust inquiry.[296] Simple rules and presumptions should filter the category of probably beneficial practices leaving only behaviour with potentially significant harm for detailed analysis.[297] In a series of sequential steps, it should be demonstrated that there is market power and incentives to behave in an anticompetitive way or that output is reduced.[298] Only practices that pass these filters should be examined under the detailed inquiry of rule of reason. According to Easterbrook the use of filters will cut the inquiry short in most cases.[299]

Piraino also acknowledges the difficulties of the strict per se versus rule of reason dichotomy. Instead of using them as 'opposite theoretical approaches' he proposes that they be treated as different evidentiary standards.[300] This suggests that they differ only in the amount of analysis needed to reach a conclusion. He suggests that market conduct be divided into three categories with evidentiary presumptions.[301]

At the one end of this continuum (eg horizontal price fixing), enforcers should apply a presumption of illegality. In the case of vertical restraints, as the other extreme, a presumption of legality seems appropriate. Finally, conduct in the middle would necessitate a detailed analysis of market power. Within the category of presumed illegality, the party alleging the infringement would be excused from demonstrating market power and the burden should shift to the other party to show pro-competitive justifications.[302] In the middle category, market power should be demonstrated, while the other side could rebut potential negative effects by presenting efficiency arguments. Presumed legality would focus on the ancillarity of a particular restraint

296 Easterbrook 1984 (n 237) 14.
297 ibid 17.
298 ibid 19-38.
299 ibid 18.
300 Piraino 1994 (n 267) 1769.
301 ibid 1771.
302 ibid 1778-1779.

irrespective of the number and size of undertakings involved or the restrictions imposed. Solutions ancillary to the efficiency benefits would be presumed legal.

Arthur also describes a structured, multi-step decision framework as a workable rule of reason.[303] Beckner III and Salop offer a decision theoretic approach by applying a multi-stage decision process.[304] At each stage of the process the court can decide on the case or gather further information taking into account the costs and benefits of obtaining this additional information.[305] This corresponds to filters used in the other approaches described above.

Finally, the views of the Federal Trade Commission (FTC) also merit consideration. The FTC's first attempt to establish its own structured rule of reason approach was the 1988 *Massachusetts Board of Registration in Optometry* case where it applied a quick look-style approach.[306] With regard to 'inherently suspect' conduct, it allowed efficiency justifications to be advanced. In the case of plausible efficiencies it proposed to mandate a detailed inquiry into these arguments. Should the party succeed with the detailed efficiency arguments, the case should be assessed under the full balancing of the rule of reason.

In its more recent *Polygram Holding* decision the FTC revisited its analytical framework.[307] Accordingly, while demonstrating inherently suspect conduct may help to avoid a full rule of reason analysis, it triggers a need to advance plausible efficiency justifications by the other party at the same time. If it is successful, the burden shifts back, requiring a more detailed demonstration that the restraints at issue are indeed likely to harm competition. However, it is still not necessary to pursue 'the fullest market analysis'; rather a flexible analysis appropriate to the case. Arguments can be raised regarding less restrictive means of achieving the efficiencies or in response to more detailed justifications. The fuller review of efficiency arguments is carried out only to the degree necessary in light of likely

303 Arthur 2000 (n 259) 371-389.
304 Beckner III and Salop (n 256) 55-61.
305 ibid 56.
306 *Massachusetts Board of Registration in Optometry* 110 FTC 549 (1988).
307 *Polygram Holding, Inc* In re 2003 WL 22443617 (FTC 2003). See opinion of the Commission from 29-35.

anticompetitive effects being demonstrated.[308]

To conclude, the US experience of enforcing antitrust rules provides a good illustration of the difficulties to establish an administrable and at the same time efficient enforcement system. The overall aim of minimising the total cost of false positives and negatives and the system itself inevitably requires in certain cases the application of generalised rules as opposed to case-by-case assessment. However, overly broad application of those rules remains important to hinder. The ideal solution should combine the advantages of the two extremes and apply a flexible method based on presumptions, where the burden of proof is allocated based on the general experience on probabilities of likely harm.

6.2.3.2.2 Comparison with the EU approach

The issues related to the administrability of an efficient enforcement system, which are closely connected to the more economic approach, can equally be discussed in relation to EU competition law. EU competition law faces similar enforcement problems as the US or any other jurisdiction. Legal certainty, predictability, and the need to minimise error and administrative costs should be priorities, although assessment of the importance of these individual elements may differ.

Based on the principles and experience described above, it seems evident that administrative enforcement resources would also be constrained in the EU, even if they are substantially different to those of the US. Another circumstance to be taken into account is the cost of obtaining information and gathering evidence that is needed in a procedure to enable the decision-maker to reach the correct decision. Europe does not differ in this respect either. This leads to certain levels of characterisation just as in the US. EU law clearly distinguishes between infringements by object and effect. The Court of Justice clarified the distinction by emphasising the alternative nature of these requirements (object or effect) in restricting competition. It also emphasised the distinction by the lack of a requirement to consider the actual effects of the conduct which has the object of restricting competition.

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[308] See also the FTC, DOJ 'Antitrust Guidelines for Collaborations among Competitors' available at:
<http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf> accessed 31 December 2012.

In explaining this characterisation Union Courts refer to the fact that certain forms of collusion can be regarded, by their very nature, as being injurious to the proper functioning of normal competition,[309] sufficiently harmful[310] or deleterious[311] for competition. The General Court uses the phrase 'obvious restrictions' in *ENS* and even lists these.[312] More insight is provided by the AG opinions. AG Kokott expressly mentions the procedural efficiencies of the object characterisation. She cites the aforementioned 'by their very nature' argument of *Beef Industry*, and she refers to legal certainty and the sensible conservation of competition authority and justice system resources.[313] She compares object restrictions with risk offences of criminal law to explain the justification of the lack of requirement to establish the actual anticompetitive impact.[314] Therefore object restrictions are not to be interpreted as a presumption that may be rebutted if no effects are demonstrated.

In the subsequent *Glaxo* case, AG Trstenjak uses the term 'inchoate offence' and refers to the classification of certain types of agreements based on existing experience.[315] She also emphasises the legal certainty argument. She had already raised the issue of categorisation of restrictions in *Beef Industry*, indicating that it may be helpful for undertakings and their legal advisors, especially in the system of self-assessment, ie for reasons of legal certainty.[316] At the same time she expressed reservations regarding excessive categorisation of restrictions of competition.[317]

The Commission's practice also fully endorses this characterisation approach based on certain types of agreements having a negative potential for competition by their nature. It is the high potential for negative effects that justifies the application of Article 101(1) TFEU without the need to demonstrate actual effects.[318] The Commission practice builds on the serious nature of, and the experience with these agreements, gives a list of most common object restrictions and refers to black-listed

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309 *T-Mobile Netherlands* (n 171) para 29; *Beef Industry* (n 136) para 17; case T-450/05 *Automobiles Peugeot SA and Peugeot Nederland NV v Commission* [2009] ECR II-02533 para 45.
310 *E.ON* (n 196) para 141.
311 eg *STM* (n 169) 249.
312 *ENS* (n 90) para 136.
313 *T-Mobile Netherlands* (n 171) opinion of AG Kokott para 43.
314 ibid para 47.
315 *Glaxo* (n 174) opinion of AG Trstenjak para 91.
316 *Beef Industry* (n 136) opinion of AG Trstenjak para 105.
317 ibid para 104.
318 Article 101(3) guidelines (n 167) para 21.

items of block exemptions or hard-core restrictions as additional examples.

As described above, the widely-accepted object box approach by Whish also entails the above categorisation of restrictions of competition. The most serious and potentially harmful practices are allocated to the object box without the need to investigate further their actual effects and with the only possibility of avoiding prohibition being to demonstrate efficiencies under Article 101(3) TFEU. Bailey identifies the economic, legal and practical reasons of object restrictions as follows.[319] The economic justification is provided by the serious and well-known nature of certain restrictions as accepted by both the case law and economic literature.[320] He also writes about the risk offence argument and the role played by experience in creating the object category in EU competition law. Since the object category existed right from beginning as an element of the Treaty text of Article 101(1) TFEU, he offers insights from industrial organisation, experience of other jurisdictions and policy judgment as an alternative explanation.[321] Legal certainty and optimal deterrence provide the legal reasons, while administrability clarifies the practical motivation for creating a presumption of restriction with expressly no requirement of demonstrating actual effects.[322]

Odudu describes object restrictions as either induction or intent-based presumptions.[323] Experience of certain types of agreements can serve as a basis to establish inductively the presumption. The particularly serious and highly likely consequences of certain agreements, ie obvious restrictions, justify this approach. He also emphasises that intent seems to explain object restrictions since any outcome that is intended is also more likely to occur in fact.[324]

Kolstad summarises restriction by object as a presumption-based rule, which releases the party alleging the infringement from costly proof requirements, since actual effects are irrelevant.[325]

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319 D Bailey, 'Restrictions of competition by object under Article 101 TFEU' (2012) 49 Common Market Law Review 559.
320 ibid 562-563.
321 ibid 565.
322 ibid 565-568.
323 Odudu 2006 (n 164) 114.
324 ibid.
325 O Kolstad, 'Object contra effect in Swedish and European competition law' (2009)

King, in contrast, criticises the bright-line object box approach, arguing that it has remarkably little support in case law.[326] She also questions the 'necessary effect' argument connected to this approach and used by the Commission in its Article 101(3) guidelines as a justification for the lack of requirement to show actual effects for object category cases.[327] Instead, in her opinion, merely having the aim or purpose to restrict competition is enough for the object classification. The simplified nature of the object box approach has difficulties in explaining certain cases, where seemingly object box restrictions escape the restriction by object qualification.[328] These cases can be better explained by the Union Courts' more flexible approach in taking account of the legal and economic context of agreements, which seems necessary. This can result in potentially any restriction of competition being an infringement by object.[329]

Mahtani also indicates the shortcomings of the object box approach and discusses examples where object box restrictions either avoid identification as object restriction,[330] or are identified as such without express reference to a generally accepted category of object restrictions.[331] As a structured solution, he proposes three means of defining object restrictions: a category of specific restraints; the aim of the parties to the restriction; or the result of an abridged effect analysis.[332]

It seems clear that European competition law also applies some sort of categorisation where sufficiently deleterious agreements do not require proof of actual effects, as extensive market analysis is required for other potentially anticompetitive practices. The Commission's practice and recent case law, and especially the opinions of Advocate Generals suggest that the benefits for legal certainty and administrative purposes could justify the distinction between restriction by object and restriction by effect. This is a similarity with the US system and generally in line with the requirement of an administrable and efficient enforcement system. The comparison

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Uppdragsforskningsrapport 2009:3, 4-5. Available at: <www.kkv.se/upload/Filer/Trycksaker/Rapporter/uppdragsforskning/forsk_rap_2009-3_object_contra_effect.pdf> accessed 31 December 2012.

326 King 2011 (n 194) 270.

327 ibid 273.

328 ibid 275.

329 ibid 295.

330 Mahtani 2012 (n 195) 8-20.

331 ibid 20-25.

332 ibid 27-35.

between the US per se versus rule of reason and EU object versus effect restrictions seems unavoidable due to these similarities, just as the assessment of how the two jurisdictions cope with the difficulties of imperfect information and enforcement costs due to error and administrative costs.

Although both jurisdictions offer similar justifications for isolating certain by their nature serious restrictions for abstract, rule-based assessment, it would be seriously misleading to equate per se and object, or rule of reason and effect restrictions. The function of these distinctions seems partly similar, yet the way they function and the environment they operate in is significantly different. On the one hand, when determining the legality of an agreement, US courts apply the substantive test contained in Section 1 of the Sherman Act which has been applied in its totality from the beginning both in public and private law enforcement (which is more prevalent). In Europe, on the other hand, Article 101 TFEU has a bifurcated structure with the two substantive parts of Article 101(1) and 101(3) TFEU which were applied for many years in their totality only by the Commission. It is important to consider the consequences of this approach.

A per se treatment reflects the assessment of the totality of an agreement's effects. When US law applies the per se approach it is assumed that the agreement has such 'pernicious effects on competition and lack of any redeeming virtue' that an economic analysis can be avoided as this can be 'so often wholly fruitless when undertaken'.[333] These restrictions are called 'naked' restraints in the US or known as 'hard-core' restrictions in other parts of the world. The lack of beneficial effects is always the distinctive element in definitions of hard-core restrictions.[334] Per se illegality means that the court refuses to consider one or more factors that would be otherwise decisive for the decision on illegality.[335] In practice, this could exclude any inquiry into the reasonability of fixed prices, or the existence of effects or

333 *Northern Pacific* (n 270) 5.

334 Glossary of terms used in EU competition policy 22: 'Refers to restrictions of competition by agreements or business practices, which are seen by most jurisdictions as being particularly serious and normally do not produce any beneficial effects.'
Available at: <http://ec.europa.eu/competition/publications/glossary_en.pdf> accessed 31 December 2012.

335 Areeda Hovenkamp (n 285) ¶1510, 415.

market power, or claims with regard to possible justifications.[336]

Restriction by object, in contrast, forms only part of Article 101(1) TFEU and the possibility of beneficial effects are assessed subsequently under Article 101(3) TFEU. Consequently, an object restriction can still benefit from Article 101(3) TFEU and thus avoid the prohibition of Article 101(1) TFEU. An object classification, compared to the US per se approach, is only the first half of the assessment.[337] In theory any restriction could escape the prohibition of Article 101(1) TFEU if the conditions of the legal exception under Article 101(3) TFEU are fulfilled.[338] This is an important distinction between the two concepts.

In the same vein, a US rule of reason analysis takes account of all aspects of an investigated agreement. It applies Section 1 of the Sherman Act in its totality, examining both allocative and productive efficiencies and inefficiencies and balancing these where necessary. In contrast, European effect analysis only considers limited aspects, ie allocative inefficiency.[339] The balancing exercise with pro-competitive effects occurs only under the Article 101(3) TFEU part of the assessment and is not within the ambit of effect analysis of Article 101(1) TFEU.[340] The bifurcated nature of Article 101 TFEU does not provide any other solution for EU competition law. If the full competitive assessment is carried out under Article 101(1) TFEU, the role of Article 101(3) TFEU would be redundant. This is a fundamental difference between the US rule of reason approach and the European effect analysis. Therefore any call for a European rule of reason would be against the logic of this provision.[341]

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336 ibid.

337 See *Beef Industry* (n 136) para 21.

338 Case T-17/93 *Matra Hachette v Commission* [1994] ECR II-595 (*Matra Hachette*) para 85.

339 O Odudu, 'A new economic approach to Article 81(1)?' (2002) 27 European Law Review 100.

340 O2 (n 197) paras 69-70; Case C-235/92 P *Montecatini v Commission* [1999] ECR I-4539, para 133; Case T-112/99 *M6 and Others* v *Commission* [2001] ECR II-2459 paras 72-77; and Case T-65/98 *Van den Bergh Foods v Commission* [2002] ECR II-4653, paras 106-107.

341 One of the reasons for arguing more scope for taking into account pro-competitive effects under Article 101(1) TFEU was the need to avoid the Commission's burdensome exemption procedures under Article 101(3) TFEU that were in force till 2004. The related debate on the exact scope of restriction of competition is more related to the bifurcated nature of Article 101 TFEU. See more in detail eg in: R Nazzini, 'Article 81 EC between time present and time past: a normative critique of "restriction of competition" in EU law' (2006) 43 Common Market Law Review 497; R Whish and B Sufrin, 'Article 85 an the Rule of Reason' (1987) 7 Yearbook of European Law 12; M Marquis, 'O2 (Germany) v Commission and the exotic mysteries of Article 81(1) EC' (2007) 32(1) European Law Review 29; B Robertson, 'What is a Restriction

The direct comparison between per se versus rule of reason and object versus effect is misplaced due to the above considerations. Still, if these concepts must be considered as parallels, it can be established that, from a procedural point of view, EU competition law has no comparable concept with per se restrictions. On the other hand, both object and effect analysis functions as a sort of rule of reason approach where the final conclusion is reached after the assessment of both anti-competitive and pro-competitive effects.[342]

Object restrictions show similarities with the various 'quick look', 'abbreviated', 'truncated', 'structured', or 'flexible' rule of reason methods of the US.[343] In those cases, once an 'inherently suspect' restriction is identified, the analysis can proceed directly to the efficiency arguments and possible justifications without actual demonstration of anti-competitive effects or market power. Object restrictions seem to work in a comparable manner. Restrictions that are by their nature injurious to the proper functioning of normal competition can escape the prohibition of Article 101(1) TFEU only by satisfying the conditions of Article 101(3) TFEU. In other words, parties must present efficiencies that would outweigh the negative effects that are presumed. Finally, the European equivalent of a full-scale rule of reason might be the effect approach of EU competition law. An extensive market analysis should be conducted in both cases, identifying and balancing both positive and negative effects on competition.

If the application of the 'quick look' rule of reason and object methodologies is compared, it can be seen that the initial burden of proving 'inherently suspect' or 'by their nature' restrictions is always with the party alleging the infringement. After

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of Competition? The Implications of the CFI's Judgment in O2 Germany and the Rule of Reason' (2007) 28 European Competition Law Review 252; O Odudu, 'Interpreting Article 81(1): demonstrating restrictive effect' (2001) 26 European Law Review 261.

342 As Kjølbye states in his comment on the Article 101(3) guidelines, 'taken as a whole Art.[101](1) and (3) contain all the necessary elements of a rule of reason where the anticompetitive aspects of agreements are analysed under Art.[101](1) and precompetitive elements are analysed and balanced against the anticompetitive elements under Art.[101](3)'. L Kjølbye, 'The new Commission guidelines on the application of Article 81(3): an economic approach to Article 81' (2004) 25 European Competition Law Review 566 (Kjølbye 2004).

343 See section 6.2.3.2.1 The US experience. Andreangeli also finds similarities in the approach of US case law and the judgment in *Beef Industry*. She argues that the Court of Justice's emphasis on the economic and legal context of agreements and the fact that an object restriction can be still found after it, means a switch from the strict object/effect dichotomy to a continuum like approach. See A Andreangeli, 'From Mobile Phones to Cattle: How the Court of Justice is Reframing the Approach to Article 101 (Formerly 81 EC Treaty) of the EU Treaty' (2011) 34 World Competition 215, 235-237.

discharging this burden, the party alleging the infringement will prevail unless the other party can demonstrate the possibility of efficiencies. In the latter case the other side is required to show actual negative effects, or in the EU 'to provide an explanation or justification, failing which it is permissible to conclude that the burden of proof has been discharged'.[344]

In other words, whenever the parties to an agreement rely on facts that offer a plausible explanation as to why 'the occurrence of the appreciable objective advantage is sufficiently likely',[345] the party alleging the infringement has to explain why those advantages do not outweigh negative effects or can be achieved by less restrictive means. Furthermore, in 'effect' and 'full-scale rule of reason' cases the party alleging the infringement needs to demonstrate negative effects and market power, while the other side has to submit appropriate efficiency justifications to demonstrate the pro-competitive nature of the agreement. In both jurisdictions proven harm and benefits should ultimately be balanced against each other.

Finally, European competition law has the peculiarity of market integration as an objective which is non-existent in US antitrust law. Both the Commission and Union Courts emphasised the pre-eminent role that EU competition law has played in market integration. This is reflected by the treatment of certain vertical restrictions as object restrictions right from the beginning. EU case law, for example, regards resale price maintenance as an object restriction. In the US, on the other hand, the Supreme Court's judgment in *Leegin* changed the long-established per se treatment of resale price maintenance to the rule of reason approach. However, as discussed in the previous paragraph, as the EU object approach can be viewed as a type of rule of reason approach, the US may be considered to have aligned its practice to European standards.

The differences described of the US per se versus rule of reason and European object versus effect distinction may suggest that this leads to diverse outcomes in many cases. For example, agreements such as naked or hard-core restrictions would be prohibited in the US, whilst they may be authorised in Europe. It can also be argued that vertical restraints may receive harsher treatment in Europe. In fact, in most of

344 *Glaxo* (n 174) para 83.
345 ibid para 93.

the cases, authorities or courts could reach the same conclusion on both sides of the Atlantic, albeit using different methods or logic.

Take the example of naked/hard-core restrictions. In the US, previous experience suggests that truly naked restraints receive a per se treatment with no possibility of justifying or assessing effects due to the inherent lack of redeeming virtues. In the EU, these agreements have the object of restricting competition and the conditions of Article 101(3) TFEU may be examined. However, this does not necessarily also mean that they would be exempted. Just as under US antitrust law, the lack of any beneficial effects would lead ultimately to the prohibition of these practices. Article 101(3) TFEU requires that efficiencies are passed on to consumers without eliminating competition and in the least restrictive way. The aforementioned paragraph 85 of the *Matra Hachette* judgment of the General Court confirms this: 'in principle, no anti-competitive practice can exist which, whatever the extent of its effects on a given market, cannot be exempted, provided that all the conditions laid down in Article [101(3)] of the Treaty are satisfied'.

However, it is also unlikely that an agreement which creates true benefits for consumers by integrating assets would be per se prohibited in the US just because it included eg price fixing or other hard-core restrictions in their literal sense.[346] Often certain claimed justifications need to be considered or rejected in determining whether the practice really falls within the per se rule, ie into the category where no justification would be available. Accordingly, even in the US, practices that demonstrate appropriate justifications may be classified outside the strict per se domain and provide a case for a quick look or truncated analysis.

In the case of vertical restraints, and in particular resale price maintenance, the general principle of *Matra Hachette* applies, but the vertical guidelines expressly highlight the possibility of exempting even object restrictions, such as resale price maintenance.[347] If applied properly, the formally different approaches of object and rule of reason should not result in strikingly divergent outcomes here either.

As discussed above, an administrable and efficient competition law enforcement

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346 See eg *Broadcasting Music Inc v Columbia Broadcasting System Inc* 441 US 1 (1979), or *NCAA* (n 276).

347 Vertical guidelines (n 215) paras 47, 64 and 223.

system combines both the rule-based abstract categorical approach and the individual case-by-case approach. It aims to minimise the total costs of false positives and false negatives just like the cost of administering the system itself. The legal design of EU competition law and the practice developed by the Union Courts shows advantages and similarities learned from the US experience of requiring significant efforts to deal with administrability issues in its history of more than 100 years.

In fact, the system of EU competition law seems to be less predetermined by the object versus effect dichotomy than US antitrust law is by the equivalent per se versus rule of reason dichotomy. The bifurcated structure of Article 101 TFEU, and the consequence that restriction by object or effect forms part of Article 101(1) TFEU, while both forms of restriction can benefit from the legal exception under Article 101(3) TFEU, brings the whole system more into line with the ideal systems proposed in the literature on administrability and procedural efficiency. The per se restriction provides a generalised and conclusive application of the rule of reason for a whole class of practices. The object classification, in contrast, provides more of an inconclusive burden-shifting presumption that can be rebutted by the demonstration of pro-competitive effects under Article 101(3) TFEU. The object classification also reflects the policy choice that certain practices might be allowed only if accompanied by proven efficiencies. Otherwise, this limited category of practices is regarded as undesirable, even in the absence of actual effects (risk offence nature).

Under Article 2 of Regulation 1/2003, the burden of proving an infringement of Article 101(1) TFEU is on the party or authority alleging the infringement, while the alleged infringer must establish that it can benefit from the legal exception of Article 101(3) TFEU if it wants to argue the inapplicability of the general prohibition of Article 101(1).[348] In conjunction with the case law on object and effect restrictions, these rules establish that in most of the cases (restrictions by effect) the initial burden of showing the infringement rests heavily on the party alleging the infringement. They should be advised to pursue a full market analysis and identify negative effects on prices, output or product quality. The alleged infringer's obligations to justify its

[348] Regulation 1/2003 (n 221). See also for example case 42/84 *Remia and others v Commission* [1985] ECR 2545, para 45; or joined cases 43/82 and 63/82 *VBVB and VBBB v Commission* [1984] ECR 19 (*VBBB*) para 52.

market practice by verified efficiencies arises only after the success of this usually challenging and uncertain process.

In the limited cases of object restrictions, however, this first step is more easily surpassed by way of the policy decision that effects do not have to be considered. Demonstrating that the agreement has the object of restricting competition shifts the burden immediately to the alleged infringer which must demonstrate efficiencies. The object qualification does not cut off the inquiry into the assessment of the practice as the per se approach but just shifts the burden.[349] This takes into account the fact that evidence is neither perfect nor complete, which is particularly true for competition law cases where economic analysis plays a crucial role.[350] The assignment of the burden of proof should reflect the policy judgement as to who should bear the consequences of any possible evidentiary failures.[351] It enables the creation of procedural shortcuts that favour the most plausible claim based on previous experience or policy aims such as market integration.[352]

Ideally, the filters, presumptions and shortcuts are elaborated on the basis of economic thinking and general experience with particular types of business behaviour. The allocation of the burden of proof and the standard of proof required should reflect the perception and evaluation of potential false positives and negatives. This would mean that applying generalised rules and case-by-case assessments are not contradictory approaches traded off against each other by the enforcer. If generalised rules are also based on economic thinking and experience with certain practices, then they are part of the more economic approach and not the target of it.[353] A solution like this contributes to the administrative efficiency of enforcement, preserving at the same time the benefits of economic analysis.

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349 See also Areeda Hovenkamp (n 285) ¶1914d.

350 Hovenkamp 2005 (n 271) 267.

351 ibid.

352 ibid 268.

353 Christiansen and Kerber (n 257) 237. Others interpret the recent Court of Justice judgments of *T-Mobile* (n 171) and *Beef Industry* (n 136) as a firm statement that economisation of EU competition law should not change the law to the detriment of legal certainty. Gerbrandy argues that the object/effect dichotomy stands firm, even if economics question it. See: A Gerbrandy, 'Case C-8/08, T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV, Vodafone Libertel NV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit, Judgment of the Court of Justice (Third Chamber) of 4 June 2009' (2010) 47 Common Market Law Review 1199, 1209. As discussed, the conflict between the more economic approach and the application of categorisation or presumptions is artificial, if the costs of errors and administration are also taken into account.

Odudu discusses the burden-shifting interpretation of the object category but rejects it on the following grounds.[354] Firstly, the approach does not explain why the burden can only be satisfied under Article 101(3) TFEU. Secondly, he considers that if the classification criterion is the necessary consequence of restricting competition, then the distinction between burden-shifting and the necessary consequence rationale collapses. Finally, he refers to the difficulty of balancing unmeasured allocative inefficiency under Article 101(1) TFEU with productive efficiency of Article 101(3) TFEU.

However, these arguments do not necessarily call into question the burden-shifting function of the object category. As a burden-shifting tool the object classification does no more than to invert the usual order of bringing forward evidence.[355] Using the arguments of AG Kokott, it can be seen that certain practices which by their very nature are injurious to normal competition are prohibited similarly as risk offences. The presumption of negative effects is not to be rebutted at the stage of Article 101(1) TFEU. It conserves administrative resources based on the experience of the social effects of these practices. In an ideal situation, the presumption reflects the fact that in the majority of the cases the outcome of the assessment would not be substantially different even where a detailed case-by-case assessment is conducted, although this would be substantially more costly and resource-intensive.

These circumstances justify the policy choice that Article 101(3) TFEU should be invoked in each object case. All object restrictions which do not result in efficiencies are prohibited. Or to put it differently, whenever an object restriction creates positive effects, these can, and should be examined.

The risk offence argument also answers the 'necessary effect' issue raised by Odudu. To use the above mentioned example of the AG Kokott, drink driving constitutes a criminal offence regardless of whether the driver causes a road accident or endangers anyone. However, it is indeed possible that certain agreements do not create any allocative inefficiency but still, by way of the presumption and the absence of effect

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354 O Odudu, 'Interpreting Article 81(1): the object requirement revisited' (2001) 26 European Law Review 379, 382-383.

355 See also L Peeperkorn, 'Revised EU competition rules for supply and distribution agreements' 210, available at: <http://ec.europa.eu/competition/speeches/text/sp2011_10_en.pdf> accessed 31 December 2012.

analysis they should bear the burden of showing efficiencies. For example, the parties could lack any market power on the relevant market, and therefore their practice has no actual effect. Nevertheless, even in these cases, a prohibition does not 'sacrifice' any benefit for society as a whole. Rather, it condemns parties that 'tried to harm the public but were mistaken in their ability to do so'.[356]

A similar approach can be seen in the opinion of AG Kokott in *Expedia*.[357] In paragraph 50 of her opinion, she argues that undertakings entering into an agreement with a restrictive object are presumed to always intend an appreciable effect on competition, irrespective of the size of their market share and turnover. In other words, the lack of market power does not save an agreement from the general prohibition. The Court of Justice confirmed this approach in its judgement.[358]

Finally, since the object category only shifts the burden to the other party, ie reverses the usual order for adducing evidence, it does not enable the party alleging the infringement to argue for prohibition without demonstrating allocative inefficiency. Paragraph 83 of the *Glaxo* judgment mentioned above clearly provides that although the burden of proof falls on the undertaking arguing for the legal exception under Article 101(3) TFEU, 'the facts relied on by that undertaking may be such as to oblige the other party to provide an explanation or justification, failing which it is permissible to conclude that the burden of proof has been discharged'.

Consequently, whenever the burden shifts to the undertakings party to the agreement and they rely on a plausible theory of how the restrictions would create efficiencies, the party alleging the infringement is required to explain why those efficiencies would be insufficient for the purposes of balancing the anti-competitive and pro-competitive effects of the practice. This necessitates effective assessment of the likely negative impacts on competition before the final balancing.[359] As the Commission explains, 'although, in legal terms, these are two distinct steps, they may in practice be an iterative process where the parties and Commission in several

356 Areeda Hovenkamp (n 285) ¶1509, 411.
357 *Expedia* (n 157).
358 ibid para 37.
359 Vertical guidelines (n 215) paras 47 and 223.

steps enhance and improve their respective arguments'.[360]

In an enforcement system such as that of the EU described above, it is important that the efficient outcome of cases is not distorted by an uneven allocation of the burden of proof or the excessively high standard of proof required from only one of the parties. This follows from the more economic approach, ie from the need to minimise false positives and false negatives.

Unbalanced rules may either make it too easy to prove an infringement thereby leading to false positives or, if it is too difficult to prove an infringement, this may produce false negatives. An undesirably distortive effect would arise if the party alleging the infringement only needs to demonstrate the object classification while the parties to the agreement would be required to conduct a detailed efficiency analysis. In clear-cut cartel cases, demonstrating mere object classification is a difficult task on its own due to the clandestine nature of these practices. On the other hand, information about horizontal cooperation agreements is often easily available in the public domain, so the mere demonstration of an object restriction can be straightforward. The burden-shifting function of the object category ensures that whenever the parties to an agreement discharge the heavy burden of showing positive effects, the other side will also have to demonstrate harm to an equal standard and not just as a presumption.

The standard of proof element is closely connected to the allocation of the burden of proof within this framework. The balanced allocation of the burden of proof would serve no purpose if any of the parties faced an insurmountable difficulty in meeting the standard of proof. In relation to object restrictions this translates into the necessity that benefitting from the application of Article 101(3) TFEU should not be just a theoretical possibility but rather a realistic outcome. There should not be any presumption of illegality under Article 101(3) TFEU against object restrictions nor any evidentiary requirements that would make it virtually impossible to demonstrate efficiencies. The application of Article 101(3) TFEU should stand on its own and not be predetermined by any conclusions reached under Article 101(1) TFEU. In other words, certain practices should not avoid the object classification in order to facilitate the application of Article 101(3) TFEU (or the object category should not

[360] ibid footnote 2 on page 12.

be defined narrowly just because Article 101(3) TFEU seems inappropriate to exempt object restrictions).[361]

Based on EU case law, object restrictions are in no way defined by their possible treatment under Article 101(3) TFEU, just as the application of Article 101(3) TFEU is not limited by the assessment under Article 101(1) TFEU. In his case comment on the *Glaxo* judgment, Völcker sets out the theory that the General Court might have classified Glaxo's dual pricing system as an effect restriction in order to avoid unduly prejudicing analysis under Article 101(3) TFEU.[362] He concludes, however, that the Court of Justice gave no weight to the object classification in its own Article 101(3) TFEU assessment, accordingly no harder line would be taken even in cases such as *Beef Industry* or other object restrictions.[363]

The more economic approach should be reflected in the approach of both paragraphs of Article 101 TFEU. The Article works as a whole through the combined effect of its elements. The analysis of these provisions and the conclusions on its administrability and the costs of errors and the system itself takes into account the effects of both paragraphs.

Kjølbye criticises the new Commission guidelines on horizontal cooperation agreements for the reason that it extends the object category to include non-hard-core restrictions which therefore enables it to find an Article 101(1) TFEU infringement without a thorough effects analysis.[364] He also fears that the finding of an object restriction will adversely affect any subsequent effects analysis.[365] He uses the example of the oneworld alliance to highlight the high level of integration and clear potential for efficiencies. However, potential for efficiencies is not an argument against the object qualification but rather a factor to be assessed under Article 101(3)

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361 See the example of *Visa-International Multilateral Interchange Fee* (Case COMP/29.373) Commission Decision 2002/914/EC [2002] OJ L318/17, which is often referred by commentators as a case where the Commission classified a price fixing as an effect restriction just to enable the exemption of it under Article 101(3) TFEU.

362 SB Völcker, 'Case law: Joined cases C-501, 513, 515 & 519/06 P, GlaxoSmithKline Services Unlimited v Commission, Judgment of the Court of Justice (Third Chamber) of 6 October 2009, [ECR] I-9291' (2011) 48 Common Market Law Review 175 (Völcker 2011) 182.

363 ibid 184.

364 L Kjølbye, 'Escaping effects analysis: the Commission's new approach to restrictions by object' (2011) CPI Antitrust Journal 2 (Kjølbye 2011).

365 ibid 4.

TFEU. This is established in *Beef Industry*, for example.[366] In addition, as previously established, the object qualification does not hinder the application of legal exception under Article 101(3) TFEU, and should not have any adverse effect on the outcome.

Jones raises the criticism that the object category is defined too broadly and that the presumption of illegality is extremely hard to rebut under Article 101(3) TFEU.[367] She refers to the fact that in object cases the presumption of illegality is strong, while jurisprudence that should clarify the approach of Article 101 TFEU is non-existent after Modernisation.[368] Furthermore, the only guidance provided by the Commission in its Article 101(3) guidelines[369] raises the standard of proof to very high levels, which are highly unlikely to be met. Combined with the uncertainty due to the lack of current case law on Article 101(3) TFEU, an undertaking would try to avoid the use of any hard-core restrictions, even if potential benefits are apparent.[370] The lack of any current decisions on the conditions of applying Article 101(3) TFEU may be regarded as a problematic consequence of Modernisation. This is especially true given the seemingly differing views of the General Court and the Court of Justice in the *Glaxo* case compared to those of the Commission in the Article 101(3) guidelines.

6.2.3.3 Conclusion

The EU system in the form described above seems to serve the more economic approach and contribute to minimising false positives and false negatives at reasonable costs. The object/effect distinction of Article 101(1) TFEU provides flexibility to save administrative resources in certain cases. At the same time, it enables that whenever agreements with anticompetitive effects also demonstrate potential for substantial efficiencies, the cooperation may survive the scrutiny of competition authorities.

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366 *Beef Industry* (n 136) para 21. See also paras 55-58 of the opinion of AG Trstenjak in the same case.

367 A Jones, 'Left behind by modernisation? Restrictions by object under Article 101(1)' (2010) 6 European Competition Journal 649 (Jones 2010) 655-656.

368 ibid 669. See also A Jones, 'Analysis of agreements under U.S. and EC antitrust law – Convergence or divergence?' (2006) 51 The Antitrust Bulletin 691 (Jones 2006) 760-761.

369 Article 101(3) guidelines (n 167).

370 Jones 2010 (n 367) 670.

The classification as an object restriction initially shifts the burden of proof without effect analysis to the parties to an agreement complained of. It does nothing more, however, than to change the usual order of adducing evidence. This reflects the policy decision that certain agreements should be allowed only if accompanied by proven efficiencies. The consequences of any evidentiary failure in this respect should be attributed to the undertakings party to the agreement with the object of restricting competition. Should they discharge this burden, it shifts back to the party alleging the infringement, who in turn has to demonstrate already likely negative effects instead of mere presumptions. The balancing of negative and positive effects occurs only after the successful fulfilment of this task.

6.2.4 Legal and economic context of airline alliances

Understanding the legal and economic context is essential for the competition law analysis of airline alliances. Chapter 3 provided a general overview of strategic alliances. At first glance, the definition of a strategic alliance appears pro-competitive and, as a form of cooperation, alliances appear desirable for the market. As defined in Chapter 3, a strategic alliance is a cooperation for the mutual benefit of the partners which is intended to last for a longer period and pursue strategic aims whilst the partners remain independent. It envisages integration which is achieved by the contribution of assets or knowledge to the alliance.

For undertakings, competition in a global economy requires a larger scale and scope of operations. They need to be able to react quickly in an unpredictable market environment. As described in Chapter 5, airlines have to tackle the increased pressure of liberalised markets. In particular they need to cope with the widespread regional operations of low-cost airlines, a new business model challenging the traditional form of the airline industry. In response, many airlines have chosen international expansion in the form of network extension. Strategic alliances enable them to overcome ownership restrictions to access additional markets and quickly achieve economies of traffic density, scope and scale. With the help of alliances, airlines share the risk and costs of global networks and form part of a ‘club’ which usually enables them to compete more effectively than on a stand-alone basis. They gain access to crucial traffic feeds and infrastructure which is limited by congestion.

Chapter 3 described the general approach of competition law and competition authorities to strategic alliances. Accordingly, although strategic alliances are said to be a new phenomenon of globalisation, authorities can apply their traditional competition law concepts while also taking into account the economic and legal environment. The general attitude is not hostile towards strategic alliances, especially in the absence of market power. The approach openly acknowledges the possibilities of efficiencies, therefore pro-competitive agreements can benefit from the application of Article 101(3) TFEU.

Finally, Chapter 4 described the relevant legal environment. Although most of the regulatory restrictions were dismantled on a regional basis, considerable restrictions still exist at a global level. The airline industry is deprived of the benefits of operating at a truly global level with the freedom to invest in foreign markets as any other industry (which such operation would entail). Against this background, cooperation in the airline industry can be regarded, in general, as advantageous and sometimes even necessary. However, as discussed in Chapter 5, airline cooperation and strategic alliances represent various levels of integration and intensity, ranging from looser forms of cooperation to almost merger-like integration. Case-by-case and route-by-route assessment is necessary to reach a definitive conclusion of the effects.

For a better understanding of the nature of competition in this sector, one must also refer to the relevant competition parameters. Depending on the business model used by the airlines or the market they operate in, competition takes place on the basis of various parameters. Price, schedule, frequency, quality, network characteristics, sales and distribution all can be main factors of competition.

Pricing plays a crucial role in short haul markets, especially after the rapid and unprecedented expansion of low-cost airlines. The unstoppable development of low-cost airlines, such as Southwest in the US or Ryanair in Europe, not only introduced a new approach to airline pricing, but also forced network airlines to rethink their pricing policies. Network airlines offer seats at varying prices. Liberalisation led to the proliferation of fare categories, where the cheapest tickets cost a fraction of the

most expensive tickets for the same flight.[371] Revenue management is the practice of controlling the availability of seats for sale at different fares and subject to different conditions, with a view to maximising revenue. Airlines discriminate both between and within cabin classes. With the help of sophisticated revenue management systems, airlines try to allocate seats to those passengers who value them the most, while remaining seats are sold at deeply discounted prices to avoid empty seats.

Fare competition occurs at various levels of airline pricing. The most visible prices are published fares which are made available in computerised reservation systems (CRSs). Published fares are either normal or full-price fares (without restrictions) or special or discounted (restricted tickets).[372] Airlines offer these latter fares to passengers who are willing to modify their behaviour to suit the airlines' cost and revenue management objectives.[373] Airlines also assume that these restrictions reveal the identity of high-yield business passengers who can be charged higher prices. The proportion of seats allocated to each of these categories varies according to the intensity of competition. In lower demand periods, or when faced with a competitor's promotion campaign, airlines can increase the offer of discount fares simply to adjust their pricing.

Low-cost airlines generally have a significantly less complicated fare structure, which does not make extensive use of restrictions but which offers the possibility of one-way fares. This also forces network airlines to simplify their fare structures in short-haul markets. It became inevitable that network airlines would have to abandon their traditional fare structure, particularly with the widespread use of the internet and the many price-comparison sites.

Unpublished fares also represent an important element of price competition, at least for network airlines. Unpublished fares serve specific distribution channels like travel agents or corporate customers.[374] Prices depend here on the identity and position of the particular customer. Corporate customers contract with airlines directly or through specialised travel agents. Discounts are connected to predefined

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371 See S Borenstein and NL Rose, 'Competition and price dispersion in the US airline industry' (1994) 102 The Journal of Political Economy 653.

372 On airline tariff structures see S Holloway, *Straight and level: practical airline economics* (3rd edn Ashgate Publishing 2008) (Holloway 2008) 143-146.

373 ibid 134.

374 ibid 135.

travel volumes of the undertaking concerned and can be set for particular routes, countries or regions. Low-cost airlines, as a rule, refrain from corporate or travel agent deals, since they sell almost all their tickets through their own websites.[375] Corporate customers and, to a certain extent travel agents, are extremely important for network airlines, since they provide direct access to the most valuable business passengers who are so essential for the business model of network airlines.[376] Corporate customers also take into account the network coverage an airline or alliance can provide, ie whether the particular offer covers their annual or multiannual travel needs.[377]

The next parameter of airline competition is schedule. A convenient schedule can make a significant contribution to the competitiveness of an airline's product. Business passengers find it essential to have at least the possibility of flying outbound in the early morning and inbound in the evening. This provides the most efficient way of spending a business day.

With regard to long-haul flights, the schedule might also be crucial depending on the differences between time zones. With a convenient schedule, flying on eastbound services (US-EU) enables the passenger to spend the night on the aircraft, ie travel takes place when the passenger would be asleep anyway. Services at unattractive times can prove a competitive disadvantage compared to better-timed services offered by competitors. The importance of schedule as a competition parameter also depends on the group of customers targeted by the airline. Low-cost airlines often fly at less advantageous times, however their lower yield, price-sensitive passengers are ready to accept this condition in exchange for substantially lower prices.

Flight frequency is a related parameter of competition which is important for business passengers. The more flights offered by the airlines, the better the chances that a particular flight time will suit the passenger's needs ie the less time they will

375 easyJet announced that it has reached a group contract with the House of Lords, thereby giving up its previous policy not to have corporate deals. See in Airline Weekly issue no. 399 (24 September 2012) 5.

376 See section 5.1.1.

377 Despite the importance and distinctive characteristics of this group of customers, separate markets have not been defined in any of the competition law cases thus far. See section 6.1.1.1 Network market definition.

have to wait.[378] The alternative value for business passengers to sitting at an airport or being stuck in a city is particularly costly. A higher frequency can provide a disproportionate advantage for airlines due to the 'S-curve effect', thereby securing the competitive edge in competition.[379] The frequency advantage may benefit airlines, especially in short-haul services, but also to a limited extent in long-haul markets.

Quality refers to both the 'airline product' and the service offered during a flight. This may comprise various aspects beginning with the aircraft type used, the seat configurations, on-board amenities, food served, connected ground services (eg lounges, priority boarding, extra baggage allowance, limousine service), etc. Quality may be more important on long-haul routes where the passengers can spend as many as 23 hours in an aircraft.[380] It is not surprising that airlines highlight the distinctive comfort features of their services on these routes. British Airways introduced the first flatbed seat in 1996 which has since become the industry standard. In the same vein, Airbus promotes its new A350XWB aircraft as a jet, the cabin of which '[…] provides the widest seats in its category'.[381]

On short haul routes air transport is more commodified, however the use of primary airports compared to secondary airports, on time performance, seat pitch, guaranteed absence of fuel surcharges or allowed free baggage can all be quality aspects decisive in short-haul markets. The quality element of competition might be evident when it acts like a barrier to entry on routes.

A special quality aspect of air transport services is the coverage of the airlines' network and whether it connects the most important travel generating geographic areas. The ability to fly 'from anywhere to everywhere' increases the attractiveness of the service, especially in competition for corporate customers. The attractiveness of FFPs is directly related to the available network for earning and redeeming 'air miles'. A strong FFP can be decisive in the customers' decision which airline to

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378 See the explanation of frequency and stochastic delay in section 4.4.2 Supply-side characteristics of air transport.

379 See discussion in section 4.4.1 Drivers and characteristics of air transport demand.

380 British Airways direct flight from London to Sydney leaves at 21.15 and arrives two day later in in the early morning hours at 5.15 with a total net flight time of 23 hours.

381 <http://www.airbus.com/aircraftfamilies/passengeraircraft/a350xwbfamily/> accessed 31 December 2012.

choose for the trip. Passengers sometimes seem to be ready even to choose the more expensive or less attractive flight option just to maximise their FFP benefits.

Airline distribution systems have been transformed radically over recent years by widespread use of the internet. Direct sales rapidly increase, according to a 2010 forecast they will soon represent 58% of all airline ticket sales.[382] The traditional sales channels declined continuously due to changing consumer behaviour reinforced by the airlines' efforts to reduce distribution costs in this more competitive environment. In long-haul routes, on the other hand, the strength of indirect distribution channels still matters. Travel agents still preserve their role for the access by business passengers. Airlines compete on the discounts offered and other incentives paid to travel agents. The competitive advantage of local airlines and their unrivalled access to the most lucrative local passenger groups make it difficult to compete against them.

The above competition parameters provide the context for airline cooperation, the framework upon competition takes place. On the other hand, before discussing the positive and negative effects of airline alliances, it is useful to consider the economic analytical framework of alliances. The model of Brueckner offers a good explanation of airline alliances' operating methods and features often used in the literature.[383]

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382 Executive summary, The airline IT trands survey 2011, (2011) SITA 5. Available at: <http://www.sita.aero/content/airline-it-trends-survey-2011> accessed 31 December 2012.

383 JK Brueckner, 'The economics of international codesharing: an analysis of airline alliances' (2001) 19 International Journal of Industrial Organization 1475, (Brueckner 2001) 1479; JK Brueckner and WT Whalen, 'The Price Effects of International Airline Alliances' (2000) 43 Journal of Law and Economics 503 (Brueckner and Whalen 2000); See also JK Brueckner and WT Whalen, 'The Price Effects of International Airline Alliances' (1998) Working Paper WP67, Institute of Government and Public Affairs University of Illinois available at: <http://igpa.uillinois.edu/system/files/WP67-alliance.pdf> accessed 31 December 2012.

Figure 6.2 Model of alliance cooperation

According to the model, airline 1 operates a hub at airport H connecting A, B and K as a network. Airline 2 flies out of K as its hub airport serving the airports D, E and H. To illustrate this more clearly, H can be New York and airline 1 American Airlines, while K would be London and airline 2 would be British Airways. Both airlines have their own domestic network and a transatlantic hub-to-hub flight between New-York and London. The London-New York route can be undertaken with both airlines. However, behind-beyond routes, eg Vermont-New York-London-Budapest, require interlining.[384]

Cooperation on the New York-London route would mean a parallel alliance, while cooperation on behind-beyond routes creates a complementary alliance. The former mean that actual competitors cooperate on the route, while in complementary alliances participating airlines do not compete with each other, and at the most may be potential competitors. Also, whereas parallel alliances tend to increase prices, complementary alliances exert a downward pressure on them.

Oum, Park and Zhang examined these issues in detail.[385] Basically, in a complementary alliance airlines maximise joint profit by taking into consideration the full itinerary and not just their own segment of it.[386] Together, both airlines will

384 See the definition of interlining in section 5.3.

385 TH Oum, J-H Park and A Zhang, *Globalization and strategic alliances: the case of the airline industry* (Pergamon 2000) (Oum, Park and Zhang 2000) 59-81; J-H *Park*, A *Zhang* and Y *Zhang*, 'Analytical models of international alliances in the airline industry' (2001) 35 Transportation Research Part B 865.

386 Oum, Park and Zhang 2000 (n 385) 64.

choose a higher output than they would individually because they recognise that the externalities of their decision can be internalised through the alliance.[387] Both airlines will increase output and jointly maximise their profit. The cooperation improves quality, efficiency and decreases prices and raise total traffic too. In contrast, in parallel alliances, total output is likely to decrease.[388] This happens because the alliance partners try to maximise profits in the segment where they both operate and cooperate. The two partners behave as one, as a monopoly because this maximises profit, which reduces output.

As shown by Brueckner's model, most airline alliances are not purely complementary or parallel but rather a combination of those two. The overall effect depends on the magnitude of the countervailing effects of complementary and parallel cooperation, and the extent to which the cooperating airlines' networks overlap or complement each other. These negative and positive effects from airline cooperation will be discussed separately more in detail below.

6.2.4.1 Negative effects of airline alliances

In this part, the focus is mainly on the effects of revenue-sharing joint ventures as the most integrated form of alliance. The most obvious negative effect of these airline alliances arises from the loss of direct competition between earlier competing airlines on overlap routes. Due to network characteristics, these overlaps almost always affect the routes connecting the partner airlines' hub airports, so-called 'trunk routes'. Following this logic, the conclusion that the loss of direct competition has negative effect on prices or output makes perfect sense.

6.2.4.1.1 Elimination of horizontal competition

The effect of market concentration and decrease in the number of competitors has been subject to extensive empirical research. Morrison and Winston examine the economic effects of airline mergers in 1989.[389] They find that the effect of losing actual competitors ranges from 2 to 32% and can increase to 55% when there are

387 ibid 66.
388 ibid 67.
389 S Morrison and C Winston, 'Enhancing the performance of the deregulated air transportation system' (1989) Brookings Papers on Economic Activity. Microeconomics 61.

'hub effects'.[390] Gloria and others find that the merger of the only two airlines in a market can result in an 11.9-33% increase in yields (revenue per RPM), while a three-to-two transaction may result in a 4.1-12.4% rise.[391] Werden and others examine two mergers from the 1980s and measure an increase of 4.5-5.6% in prices with regard to overlap routes.[392] Borenstein also establishes a connection between the market share of the individual airline and its ability to raise its own prices.[393] Accordingly, an increase of market share through a merger may strengthen an airline's ability to raise prices.

In a later article, Borenstein, by examining the mergers assessed by Werden and others, finds on average 11% and 8% price increases, while on certain individual routes as much as 23%.[394] Brueckner and others examine the effects of two mergers and find on average a price increase of 4.7% and 5.2% on the routes where a monopoly was created, but an increase of only 0.5% and 1% on routes with only one or two remaining competitors.[395] In a further paper, the authors again find price-increasing effects from the reduction of the number of competitors.[396]

Peters examines six US mergers from the 1980s and finds average price changes ranging from 6.5 to 29.4%.[397] Kim and Singal study the price effects of airline mergers between 1985 and 1988 and find price increases on the affected merger routes.[398] Kwoka and Shumilkina analyse the effects of the USAir/Piedmont Airlines merger and distinguish between the price effects of eliminating a sizeable competitor

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390 ibid 73.

391 GJ Hurdle, RL Johnson, AS Joskow, GJ Werden and MA Williams, 'Concentration, potential entry and performance in the airline industry' (1989) 38 The Journal of Industrial Economics 119, 132.

392 GJ Werden, AS Joskow and RL Johnson, 'The effects of mergers on price and output: two case studies from the airline industry' (1991) 12 Managerial and Decision Economics 341, 345-346.

393 S Borenstein, 'Hubs and high fares: dominance and market power in the US airline industry' (1989) 20 RAND Journal of Economics 344 (Borenstein 1989) 357.

394 S Borenstein, 'The evolution of US airline competition' (1992) 6 Journal of Economic Perspective 45, 57.

395 Brueckner, NJ Dyer and PT Spiller, 'Fare determination in airline hub-and-spoke networks' (1992) 23 The RAND Journal of Economics 309 (Brueckner, Dyer and Spiller) 329.

396 JK Brueckner and PT Spiller, 'Economies of traffic density in the deregulated airline industry' (1994) 37 Journal of Law and Economics 379 (Brueckner and Spiller) 409.

397 C Peters, 'Evaluating the performance of merger simulation: evidence from the US airline industry' (2003) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 03-1 19.

398 EH Kim and V Singal, 'Mergers and market power: evidence from the airline industry' (1993) 83 The American Economic Review 549 (Kim and Singal 1993).

and small competitors.[399] The results show a 12.1% increase for the elimination of a sizeable competitor and 8.7% for a small one.[400]

In a comprehensive study updating previous research, Brueckner and others examine the price effect of competition and also incorporate the impact of low-cost airlines.[401] The authors argue that previous studies relied on data which was already 20-30 years old, therefore failed to take into account the substantial changes that took place in the airline industry over recent years.

The results suggest that the nature of competition has been transformed over the years. The elimination of traditional network airlines as competitors has no, or only a very moderate statistically significant effect on prices.[402] In contrast, the presence of low-cost airlines in a market, and especially Southwest, has substantial positive effects on prices. The authors also rerun their model with data from 2000. The results of the study are even more revealing when compared with the results of this latter exercise. The price effects of the network airlines' presence was significantly higher with data from 2000.[403]

The authors explain these changes with important trends of the aviation industry from recent years.[404] In domestic markets, low-cost airlines irreversibly gained substantial market shares, thereby providing the most important competitive force in the market. Internet penetration also significantly increased with the direct consequences of continuously expanding internet sales of airline tickets. Price transparency through specialised online travel agencies and price comparison sites significantly restricts airlines' ability to impose price premiums. Finally, with the end of the 'golden' years of the 1990s, customers' travel policies changed on a permanent basis, depriving network airlines from their 'easy' revenue.

In addition to the elimination of actual competition, several papers dealt with the effect on prices caused by elimination of potential competition. Kwoka and

399 K Kwoka and E Shumilkina, 'The price effect of eliminating potential competition: evidence from an airline merger' (2010) 58 The Journal of Industrial Economics 767 (Kwoka 2010).
400 ibid 790.
401 JK Brueckner, D Lee and E Singer, 'Airline competition and domestic US fares: a comprehensive reappraisal' (2010 revised in 2012) working paper, available at: <http://www.socsci.uci.edu/~jkbrueck/price%20effects.pdf> accessed 31 December 2012.
402 ibid 4 and 16.
403 ibid 20-22.
404 ibid. See also section 5.1.3.

Shumilkina identified a price-increasing effect of between 5.9% and 6.1% depending on whether the potential competitor was present at only one or both endpoints of the route.[405] Morrison deals with the aggregate effect of low-cost airline Southwest in US domestic markets. He considers the effect of Southwest to be as much as 33% when the airline is present at both endpoint airports of the route of concern but not on the route itself.[406] In addition, in the weakest form of potential competition, Southwest is responsible for a decrease in prices by 6.5%. Goolsbee and Syverson observe a 17% price decrease on the incumbent airlines' side even before the actual entry of Southwest onto the route.[407] The above results demonstrate that as even the elimination of a potential competitor may have a price-raising effect, it follows that alliances between potential competitors might have the same effect.

The economic literature and empirical analysis undertaken in alliance cases also specifically deals with the price effects of alliances. Brueckner and Whalen examine the alliance effects on hub-to-hub or trunk routes[408] and find negative effects in the range of 4-6%, although the results are not statistically significant.[409] Subsequently, in another paper Brueckner again identifies negative effects on hub-to-hub routes.[410]

Kamita analyses the effects of antitrust immunity granted for a short period of time to Hawaiian airlines.[411] Depending on the benchmark used, the prices increased between 8 and 25%.[412] Bilotkach finds a price-increasing effect on hub-to-hub routes in the same magnitude (7%) as Brueckner and Whalen.[413] Wan and others, however, find either moderate effects on hub-to-hub routes or, in their explanation, negative

405 Kwoka 2010 (n 399) 790.

406 SA Morrison, 'Actual, adjacent, and potential competition, estimating the full effect of Southwest Airlines' (2001) 35 Journal of Transport Economics and Policy 239.

407 A Goolsbee and C Syverson, 'How do incumbents respond to the threat of entry? Evidence from major airlines' (2005) National Bureau of Economic Research Working Paper 11072, 8, available at: <http://www.nber.org/papers/w11072> accessed 31 December 2012.

408 They call these routes gateway-to-gateway routes.

409 Brueckner and Whalen 2000 (n 383) 535.

410 Brueckner 2001 (n 383).

411 R Kamita, 'Analyzing the Impact of Antitrust Immunity: Price Effects Following the Aloha-Hawaiian Antitrust Immunity Agreement' (2005) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 05-9 (Kamita 2005). See also in R Kamita 'Analyzing the Effects of Temporary Antitrust Immunity: The Aloha-Hawaiian Immunity Agreement' (2010) 53 Journal of Law and Economics 239.

412 Kamita 2005 (n 411) 17.

413 V Bilotkach, 'Price competition between international airline alliances' (2005) 39 Journal of Transport Economics and Policy 167 (Bilotkach 2005) 183 and 188; V Bilotkach, 'Price effects of airline consolidation: evidence from a sample of transatlantic markets' (2007) 33 Empirical Economics 427 (Bilotkach 2007) 437.

effects offset by efficiencies.[414] Brueckner and Proost discuss the potential of anticompetitive effects on hub-to-hub routes and even mention that this effect may emerge while connecting traffic using the same route rises.[415] However, they also emphasise that there is no measured fare impact on hub-to-hub routes so far.

Armantier and Richard study the US domestic alliance between Continental and Northwest.[416] They find that in those markets where both airlines operate non-stop flights, prices increased even in the absence of collusion.[417] The explanation offered for this was that an increase in the number of products in the market increases the pool of passengers that can buy the seats thereby enabling the extraction of higher prices.[418] In a follow-up article Armantier and Richard concluded that alliance effects on prices might be neutral, but if other service attributes are also taken into account, the assessment does not remain as positive.[419]

During the DOT's assessment of the Star Alliance and oneworld joint ventures in 2008-2009, the DOJ provides comments based on its empirical analysis of the effects of these joint ventures on transatlantic routes.[420] The DOJ argues that its cross-sectional analysis of third quarter 2008 fare data indicates a 15% increase in prices when the number of non-stop competitors is reduced from two to one, 6.6% for the three to two scenario,[421] and 6.3% in four to three cases.[422] This price effect was large and statistically significant compared to earlier findings.

Cross-sectional analysis is intended to demonstrate the variation of average fare variation across transatlantic routes depending on the number of airlines operating on the route, controlling for all other factors that may affect prices.[423] The oneworld

414 X Wan, L Zou and M Dresner, 'Assessing the price effects of airline alliances on parallel routes' (2009) 45 Transportation Research Part E 627, 637.

415 JK Brueckner and S Proost, 'Carve-out under airline antitrust immunity' (2010) 28 International Journal of Industrial Organization 657 (Brueckner and Proost 2010).

416 O Armantier and O Richard, 'Evidence on pricing from the Continental Airlines and Northwest Airlines code-share agreement' (2005). Available at SSRN: <http://ssrn.com/abstract=869242> accessed 31 December 2012.

417 ibid 15-16.

418 ibid 16.

419 O Armantier and O Richard, 'Domestic airline alliances and consumer welfare' (2008) 39 RAND Journal of Economics 875.

420 See DOJ Star (n 24) and DOJ oneworld (n 24).

421 DOJ Star (n 24) 25.

422 ibid 52.

423 ibid 47.

comment by the DOJ referred to the same fare effects and empirical analysis.[424] In a recent paper, the DOJ economists involved in alliance cases assessed the competitive effects of global airline alliances.[425] In their cross-section analysis, each reduction by one in the number of non-stop competitors represents a 7% average fare increase.[426]

In its own proceedings against oneworld, the European Commission prepared an empirical analysis of fare data on a large sample of transatlantic routes.[427] The analysis was intended to show the association between price and market concentration (ie the number of competitors). It was demonstrated that an average increase of prices by 2.2% for fully flexible business tickets and 5.4% of restricted economy tickets can be expected where the number of competitors is reduced by one.

With regard to negative effects on output, Oum, Park and Zhang tested their model on parallel alliances empirically with data of transatlantic alliances in the 1990s. The results confirmed their theoretical predictions. Following parallel alliances, traffic dropped by an average of 11-15 per cent.[428] The alliance between Delta, Swissair and Sabena, which could be classified as a parallel alliance, decreased aggregate demand.[429]

Based on the above findings, the elimination of horizontal competition between alliance members leads to negative effects on prices and output. This is the effect on all those hub-to-hub routes where alliance members were actual competitors before their cooperation. This also occurs in the case of revenue-sharing joint ventures where the partner airlines stop competing, ie align their incentives completely.

6.2.4.1.2 Hub dominance

Airline alliances may have the potential to negatively affect prices not only by increasing the concentration on a particular route but also through strengthening their joint position at their hub airports. This concern is made all the more legitimate in

424 DOJ oneworld (n 24) 14-15.
425 W Gillespie and O Richard, 'Antitrust immunity and international airline alliances' (2011) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 11-1.
426 ibid 9.
427 *BA/AA/IB* (n 20) para 41.
428 Oum, Park and Zhang 2000 (n 385) 71.
429 ibid 117.

the liberalised environment by traditional network airlines beginning to restructure their networks and concentrate the overwhelming majority of their operations at one or only a handful of hub airports.[430]

As discussed earlier, the theoretical foundations of deregulation and in particular the theory of contestable markets proved to be invalid in air transport.[431] Hubs and hub-and-spoke networks provide the dominant operator at the airport with numerous advantages. Economies of scope, scale and density reinforced by computerised reservation systems (CRS), frequent flyer programmes (FFP) and other loyalty schemes, revenue management systems and airport congestion have all made airlines more resistant to competition at their hub airports.[432] Several commentators examined the issues of whether dominant hub airlines are able to use their market power to deter entry and extract higher prices.[433]

One of the most influential studies in this field was written by Borenstein in 1989.[434] He concludes that an airline's market share from the traffic of an airport or on a particular route influences its ability to charge higher prices to consumers. Furthermore, the dominant airline's ability to charge higher prices is unique and does not allow smaller airlines to follow suit.[435] He estimates that an airline with 50% of the traffic at the origin and destination airport would be able to charge prices with a premium of 12% over those of smaller competitors (airlines with 10%).[436]

He describes the factors giving rise to this ability as follows. FFPs increasingly induce consumer loyalty in the case of a dominant hub airline. The FFP of the dominant airline offers the most possibilities to collect air miles and also the most valuable reward due to the most extensive network for spending them.[437] FFPs also raise barriers to entry for new entrants. These can only be competitive where they offer sufficiently low prices to compensate for the cost of switching from the

430 See section 4.2.2.
431 ibid.
432 ME Levine, 'Airline competition in deregulated markets: theory, firm strategy and public policy' (1987) 4 Yale Journal on Regulation 393, 412.
433 A good review of articles on this topic can be found in MW Tretheway and IS Kincaid, 'The effect of market structure on airline prices: a review of empirical results' (2005) 70 Journal of Air Law and Commerce 467 (Tretheway and Kincaid 2005).
434 Borenstein 1989 (n 393).
435 ibid 344.
436 ibid 360.
437 ibid 346.

incumbent (lost benefit from not travelling with the incumbent).[438] Alliances can strengthen these barriers. For the same loyalty reasons, travel agency commission override programmes (TACOs) tend to concentrate the efforts of agents with the dominant airline.

Providing most of the services from a particular city also biases ticket sales made through CRSs due to the 'crowding-out' or 'screen padding' effect. When alliances cooperate and apply codeshare agreements, the same flight can appear under different airlines' codes taking much of the space from competitors' flights on the CRS display. Given the fact that most of the bookings are made from the first display page of CRSs, the range and large number of services favours the dominant airline or alliance.[439]

Finally, limited airport infrastructure also dominated by the hub airline makes it difficult for competitors to get access at competitive conditions.[440] The control of suitable peak hour slots by the hub airline hinders competitors in offering equally competitive services. A market concentration due to the formation of alliances may have the same negative price effect at hub airports.[441]

The analysis by Borenstein already included other factors that may explain part of this price premium, however subsequent research tried to control for all these additional factors that may be the reason for higher prices. Routes to or from hub airports may be shorter than other routes, unit costs may be higher or the mix of passengers could be different, eg a higher proportion of business passengers, could all result in higher prices.[442] Borenstein also indicates natural factors such as reputation and information spill-overs as a factor, and concludes that any advantage from loyalty enhancing marketing devices increases the minimum scale needed for new entrants.[443] Local passengers may also value higher quality in the form of a

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438 See more in detail the topic of FFPs as entry barriers in the Swedish competition authority's report: 'There is no such thing as a free lounge' (2003), available at: <http://www.konkurrensverket.se/upload/Filer/ENG/Publications/rap_2003-1_eng.pdf> accessed 31 December 2012.

439 See section 4.3.2.5 Computerised reservation systems.

440 ibid 347.

441 See also *IAG/bmi* (n 20) paras 483-506.

442 Tretheway and Kincaid 2005 (n 433) 475.

443 S Borenstein, 'The dominant-firm advantage in multiproduct industries: evidence from the US airlines' (1991) 106 The Quarterly Journal of Economics 1237.

larger number of direct connections and the wide choice of destinations.[444]

Berry, Carnall and Spiller concluded that the hub premium is largely limited to the segment of business passengers.[445] Lee and Luengo-Prado find for example that much of the hub premiums can be explained by passenger mix if controlled for directly.[446] Lederman attributes a large part of hub premium to the dominant airlines' FFP.[447] Bilotkach assessed airport dominance in international transatlantic markets and demonstrated that this effect applies to these markets too and not just to US domestic markets.[448] Lijesen and others examine specifically the European hub airlines' practice and find that at least some European airlines charge hub premiums of a similar magnitude as their US counterparts.[449]

In a more recent work, Bilotkach and Pai distinguished between a market power and a quality component within the airport dominance effect.[450] While the former may be criticised, the latter is legitimately reflected in higher prices. Based on their results, Bilotkach and Pai consider that the market power-based premium derives from average passengers, since the premium of high yield passengers is quality-based.[451] As an explanation, they claim that business passengers place greater value on the higher quality services of a hub airline, such as more non-stop flights.[452]

Borenstein rejects the arguments raised in the defence of higher prices at hub

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444 S Borenstein and NL Rose, 'How airline markets work...or do they? Regulatory reform in the airline industry' in NL Rose (ed), *Economic regulation and its reform: what we have learned* (forthcoming from University of Chicago Press) (Borenstein and Rose 2008) 50, available at: <www.nber.org/chapters/c12570.pdf> accessed 31 December 2012.

445 S Berry, M Carnall and PT Spiller, 'Arline hubs: costs, markups and implications of customer heterogeneity' (1996) National Bureau of Economic Research Working Paper 5561, available at: <http://www.nber.org/papers/w5561.pdf?new_window=1> accessed 31 December 2012.

446 D Lee and MJ Luengo-Prado, 'The impact of passenger mix on reported "hub premiums" in the US airline industry' (2005) 72 Southern Economic Journal 372.

447 M Lederman, 'Are frequent flyer programs a cause of the "hub premium"?' (2008) 17 Journal of Economics & Management Strategy 35.

448 V Bilotkach, 'Asymmetric Regulation and Airport Dominance in International Aviation: Evidence from the London-New York Market' (2007) 74 Southern Economic Journal 505.

449 MG Lijesen, P Rietveld and P Nijkamp, 'Hub premiums in European civil aviation' (2001) 8 Transport Policy 193. See also X Fageda, 'Does airline competition work in short-haul markets?' (2005) available at: <http://128.118.178.162/eps/io/papers/0511/0511010.pdf> accessed 31 December 2012.

450 V Bilotkach and V Pai, 'Hubs versus airport dominance' (2009), available at SSRN: <http://ssrn.com/abstract=1349381> or <http://dx.doi.org/10.2139/ssrn.1349381> accessed 31 December 2012.

451 ibid 16.

452 ibid 17-18.

airports.[453] Even if these other factors explain part of the premiums paid by hub city passengers, they cannot explain the whole amount. In 2005, Borenstein, on the other hand, took note of the fact that the hub premium paid decreased substantially over the years,[454] which he confirmed as an ongoing trend in 2008.[455] He also discusses the possibility of the substantial expansion of low-cost airlines as an explanation.

In summary, through an alliance the existing strong position of member airlines can be further strengthened at their hub airports. The above examples come from the US domestic market, although it has been confirmed that similar effects can be expected on transatlantic routes and the associated airports, including in Europe. Keeping in mind the more restricted environment in international aviation and the more difficult operational characteristics of these markets, hub premiums can also be assumed to exist in these cases. The magnitude of any such airport dominance effect is uncertain. As shown by the US examples, network airlines' ability to charge hub premiums diminishes more and more. The substantial changes in aviation seem to restructure the competitive forces of the market. However, the probable spill-over effects into international long-haul markets of the tendencies of the US domestic and intra-EU markets will only be seen in a few years' time. Accordingly, hub dominance effects may still exert some negative effects in the case of airline alliances.

6.2.4.1.3 Vertical foreclosure

Besides the negative effects from the loss of horizontal competition between the parties, airline alliances may also produce adverse effects in vertical relation, ie on competition between the alliance parties and third parties. The hub-and-spoke networks of traditional airlines and the combination of passengers travelling on different O&D city pairs for part of their journey offer the possibility of refusing the most important input (connecting passengers) to competitors or at least of raising their costs. This strategy can foreclose competitors or weaken the competitive constraint they provide. The most obvious example would be when a hub airline,

453 S Borenstein, 'Hub dominance and pricing' (1999) available at: <http://faculty.haas.berkeley.edu/borenste/trb99.pdf> accessed 31 December 2012.

454 S Borenstein, 'US domestic airline pricing, 1995-2004' (2005) Competition Policy Center Working Papers, University of California, CPC05-48, available at: <http://escholarship.org/uc/item/7dj5k2qq> accessed 31 December 2012.

455 Borenstein and Rose 2008 (n 444) 50-51.

which is particularly strong in a certain region, after entering an alliance, gives preferential treatment to its partner airline but refuses to provide the same input to competitors.

In its 1999 report on the US airline industry, the National Research Council's Transportation Research Board (TRB) already indicated both concerns in relation to horizontal overlaps on hub-to-hub routes and vertical concerns.[456] The TRB feared that in the longer term, unallied airlines would find it difficult to interline, ie get the input of passenger feed at hub airports. This may weaken their position and threaten their survival.[457]

Reitzes and Moss argue that revenue-sharing joint ventures may raise rivals' costs by making the access conditions for connecting passengers less advantageous than the ones they offer to their alliance partners.[458] The effects of such an anticompetitive strategy not only directly affect the competitors' ability to compete in the connecting behind or beyond market but also indirectly threaten their competitive position on hub-to-hub markets. Reitzes and others use as an illustration the example of American Airlines' and Air France's position at Paris CDG and the consequences on Paris CDG-US transatlantic markets.[459]

American Airlines is a member of oneworld, while Air France cooperates with Delta in SkyTeam. American flies from Boston to Paris, Air France's hub airport where passengers can connect to or from many short-haul European destinations. If unallied with any of the US airlines, Air France has an incentive to offer traffic feed, ie connecting passengers travelling for example on Paris-Budapest or Paris-Prague routes. Its only concern is maximisation of its own profits.[460]

In an alliance setting, Air France benefits from lowering its input prices to its

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456 Transportation Research Board Special Report 255 - Entry and competition in the U.S. airline industry: issues and opportunities (1999), Chapter 4 'Effects of airline alliances and partnerships on competition' 151, available at: <http://onlinepubs.trb.org/onlinepubs/sr/sr255/chap4.pdf> accessed 31 December 2012.

457 ibid.

458 J Reitzes and D Moss, 'Airline alliances and systems competition' (2008) 45 Houston Law Review 293 (Reitzes and Moss 2008) 310.

459 JD Reitzes, D Robyn and K Neels in Public answer of American Airlines Inc, (2005) submission in DOT's Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines antitrust immunity application case, *SkyTeam I* (Docket OST-2004-19214-0097) (Reitzes 2005) 10-12.

460 ibid 10.

SkyTeam partner Delta, since through the revenue-sharing agreement between them, it internalises the effects of lower prices. Air France will be aware of the fact that lower prices increase the joint traffic with Delta, for example on the route Boston-Budapest and through revenue-sharing they both benefit from this. However, due to the same sharing of revenue, it will also be incentivised to raise prices for American Airlines.

Higher input prices (the cost for American Airlines for its passengers flying on Air France's Paris-Budapest flights) result in higher overall prices for American's tickets for Boston-Budapest flights. The increased prices of American Airlines make passengers switch to Air France/Delta's cheaper tickets. Through the revenue-sharing between Air France and Delta, the former directly benefits from the additional revenue of switching passengers caused by the price increase it imposed on American Airlines. Finally, since the profitability of connecting services and the number of connecting passengers has a direct effect on the hub-to-hub services' profitability and capacity, Air France's strategy can lead to an American Airlines capacity reduction or even complete withdrawal from the Boston-Paris route.

Such a vertical foreclosure strategy would be successful only if certain conditions are met.[461] The airline offering the connecting services should have a strong position at the hub airport leaving few alternatives for the airline intending to cooperate. It is also essential that the particular behind and beyond destinations should have limited accessibility from other hubs and the proportion of connecting passengers is significant.

Translating these conditions to the example of American and Air France would mean the following. Air France should have a particularly strong position at Paris CDG offering a short-haul network that is unmatched by competing alliances operating through London or Frankfurt. Finally, the passengers travelling on such short-haul flights should provide an essential contribution to the operational economics of transatlantic flights out of Paris. Using the example of Boston-Paris-Budapest, it would be necessary for Budapest to be almost exclusively served from Paris where Air France is the dominant operator, while the lack of Budapest passengers on the Boston-Paris segment would endanger the economic viability of American's service

[461] Reitzes and Moss 2008 (n 458) 311-312.

on the route.[462]

In their submission in the same *SkyTeam I* case where American's representatives Reitzes and others argued vertical foreclosure, Kasper and Lee seem to rebut American's allegation. They refer to the fact that American actually diverted significant traffic towards its alliance partner's London hub.[463] The decrease in traffic on Paris routes, therefore, appears to be a natural consequence of alliance formation. In addition, Air France does not seem to have an unavoidable role for the great majority of short-haul connecting European routes.

Bilotkach and Hüschelrath, based on frequency and passenger numbers, try to reveal foreclosure effects of airline alliances with antitrust immunity on transatlantic markets.[464] They find evidence that non-allied airlines' frequency and passenger numbers decrease on routes from non-hub airports to newly-immunised hubs and weak indications that the traffic between competing hubs also decreases.[465] This seems to suggest vertical foreclosure effects created by alliances, since the partner airlines prefer to channel passengers to their partners' flights thereby putting competitors at a competitive disadvantage. On the other hand, the authors emphasise that the analysis did not take into account the effects on costs and efficiencies, which may counter the negative effects of their conduct.[466] Chen and Gayle present a model where code-sharing can lead to the foreclosure of non-integrated third party airlines.[467]

Besides the theoretical possibility of vertical foreclosure discussed above, the EU Commission has preliminarily raised vertical foreclosure concerns in relation to the oneworld alliance on the London-Chicago and London-Miami routes.[468] The Commission noted that most airlines would not be able to start or sustain

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462 See Reitzes 2005 (n 459) 22-24 on Air France's strategy concerning non-alliance transatlantic operators.

463 DM Kasper and DN Lee in Reply of the Joint Applicants, (2005) DOT's Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines antitrust immunity application case, *SkyTeam I* (DOT-OST-2004-19214-0114-0009) 19-20.

464 V Bilotkach and K Hüschelrath, 'Airline alliances, antitrust immunity and market foreclosure' (2012) ZEW Discussion Paper No. 10083, available at: <ftp://ftp.zew.de/pub/zew-docs/dp/dp10083.pdf> accessed 31 December 2012.

465 ibid 23.

466 ibid 24.

467 Y Chen and PG Gayle, 'Vertical contracting between airlines: an equilibrium analysis of codeshare alliances' (2007) 25 International Journal of Industrial Organization 1046.

468 *BA/AA/IB* (n 20) para 51.

transatlantic long-haul operations without the appropriate number of connecting passengers.[469] This passenger volume can either come from self-feed or from third parties operating at the airport. The parties proved to be an important source of traffic feed in these two markets.

The Commission considered the alliance partners' strong position on the routes themselves and the extensive range of short- and medium-haul routes feeding traffic into these transatlantic routes. It assessed the overall importance of connecting passengers for these transatlantic operations, whether the competitor can replace this input with traffic feed from other airlines and finally the possible consequences of successful foreclosure for competition on these routes.[470] The assessment of foreclosure issues, therefore, requires consideration of the parties' ability and incentives to restrict access to connecting traffic, as well as the likely impact.[471] The incentive to foreclose depends on the degree to which foreclosure would be profitable.[472] In essence, this is a trade-off between the sales lost in the upstream market (by not providing traffic feed) and the extra revenue generated in the downstream market (by eliminating a competitor). Whenever downstream competitors play an important role in downstream competition, significant harm can be expected to result from the foreclosure.

Foreclosure may occur not only by imposing higher prices for connecting passengers but also by the disadvantageous alteration of access conditions. Providing access to fare classes which do not correspond to the requirements of the other airline, requiring long connection times, or minimum sales from the other airline all produce the same negative effects as imposing price conditions.

To conclude, the fact that airlines within alliances concentrate on cooperation with their competitors is not anticompetitive in itself. Alliances may intensify competition by improving services and achieving efficiencies. However, when an alliance is weaker in a certain geographic region, while another is dominant, such practices may restrict competition to the detriment of consumers. In addition, airlines operating independently of alliances may be weakened, forced to enter alliances or even

469 ibid para 43.
470 ibid para 50.
471 See also *IAG/bmi* (n 20) paras 507-551.
472 ibid para 537.

eliminated.

6.2.4.1.4 Multimarket contact

The airline industry, where airlines operate on thousands of separate but interrelated O&D markets, can be an ideal environment for multimarket contacts that soften the competitive forces.[473] When airlines or airline alliances face each other on various markets, their behaviour can 'be conditioned by both the firm's internal structure and by extended interdependence from intermarket contacts (that is, any action taken against multipoint competitors could generate reactions in other jointly contested markets)'.[474] When deciding on strategy, the fact that a particular market action can provoke reactions in a large number of other markets where the undertaking faces the same competitor could be a factor.

Multimarket contacts, market transparency, the possibility of rapid reactions by using CRSs, the inherently oligopolistic market structure of the airline industry, and the absence of lumpy orders and big buyers may favour the emergence of oligopolistic interdependence.[475] The analysis by Evans and Kessides reveal the presence of statistically significant and quantitatively important multimarket effects.[476] They find that fares are higher in markets served by airlines with extensive multimarket contacts.[477]

Kim and Singal also identify price-increasing effects arising from multimarket contacts when studying airline mergers in the period of 1985-1988.[478] They emphasise that while market power resulting from concentration may be countered by increased efficiencies, 'market power due to multimarket contact has no redeeming features'.[479] In a follow-up article, Singal explores further the issues of multimarket contacts.[480] He finds positive correlated changes in prices with the

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473 For a general discussion of multimarket contacts see BD Bernheim and MD Whinston, 'Multimarket contact and collusive behavior' (1990) 21 The RAND Journal of Economics 1.

474 WN Evans and IN Kessides, 'Living by the "golden rule": multimarket contact in the US airline industry' (1994) 109 The Quarterly Journal of Economics 341.

475 V Singal, 'Airline mergers and multimarket contact' (1996) 17 Managerial and Decision Economics 559 (Singal 1996). On airlines ability to coordinate prices see also DOJ 2001 (n 53).

476 ibid 365.

477 ibid.

478 Kim and Singal 1993 (n 398) 565.

479 ibid 568.

480 Singal 1996 (n 475).

changes in multimarket contacts for long-distance routes.[481] These include an increase in fares whenever there is an increase in multimarket contact, even if concentration decreases at the same time.[482]

Fournier and Zuehlke conclude that multimarket contacts reduce the risk of fare wars between competing airlines.[483] Bilotkach examines the effect of increased multimarket contacts on non-price product characteristics such as frequency and aircraft size in relation to the US Airways/America West merger and finds negative effects on competition.[484]

Multimarket contacts can be important in the case of global airline alliances which, combined, control almost 58% of global air transport.[485] Airline alliances strive to include members from each of the important travel-generating regions of the world: on a global level they compete on tens of thousands of markets. More specifically, revenue-sharing alliances on the transatlantic market compete head-to-head on thousands of O&D city pairs. Although this has not been examined so far, the fact that three dominant alliance groups rule these markets may entail the risk of anticompetitive effects due to multimarket contacts. With the advance of airline consolidation and alliance integration, it has been considered that competition policy analysis should pay increasing attention to the effects of multimarket contacts.[486]

6.2.4.2 Benefits of airline alliances

Chapter 4 discussed cost constraints and demand and supply-side characteristics of airline operations. It also described how the regulatory environment changed with deregulation and liberalisation. In Chapter 5, the different responses given by airlines to these circumstances were considered, as were the emergence of airline alliances due the competition and changing consumer preferences in a globalised market. In the following section, the issue of whether alliances fulfil their role to realise pro-

481 ibid 560.
482 ibid.
483 GM Fournier and T Zuehlke, 'Airline price wars with multi-market carrier contacts and low-cost carrier entrants' (2003) paper prepared for the International Industrial Organization Conference, Boston, Massachusetts, April 5-6, 2003, available at: <http://mailer.fsu.edu/~tzuehlke/papers/farewars.pdf> accessed 31 December 2012.
484 V Bilotkach, 'Multimarket contact and intensity of competition in dynamics: evidence from an airline merger' (2009) 38 Review of Industrial Organisation 95.
485 See section 2.4.
486 See also Singal 1996 (n 475) 571.

competitive benefits, besides the obvious potential for negative effects mentioned above, will be discussed. Given the role played by airline alliances in dealing with the operational constraints of air transport and responding to consumer needs, benefits should be relevant either for the supply side or the demand side of aviation.

6.2.4.2.1 Supply-side benefits

Elimination of double marginalisation

As mentioned above, airlines with largely complementary networks may benefit from cooperation when demand exists for services across networks. In a complementary alliance, partner airlines consider the full itinerary and maximise joint profit instead of having regard only to their own segment. Accordingly, both airlines will set lower prices than they would choose individually because they recognise that the externalities of their pricing decision (increase in demand) can be internalised through the alliance. Both airlines will increase output and jointly maximise their profit. In the literature this is called the 'elimination of double marginalisation'.

In theory, the deeper the cooperation between the parties, the more they can align their prices and eliminate double marginalisation. Without bilateral cooperation between two airlines, travelling on the network of different airlines occurs under the conditions of the IATA Multilateral Interlining Traffic Agreement (MITA) or multilateral prorate agreement. This agreement determines on a multilateral basis the amount that the operating airline will charge the other airline for conveying further the latter's passenger. By the very nature of the agreement, the conditions of the MITA are less advantageous since they take into account the interest of multiple airlines and do not allow for an individualised approach. The adoption of an IATA fare requires unanimity, therefore prices will be skewed and correspond to the costs of the less efficient airline taking part in the process.[487]

In a simple code-share agreement, airlines can achieve lower prices due to the bilateral nature of their relationship, however the own profit maximisation element

[487] See more in detail, JK Brueckner, 'International Airfares in the Age of Alliances: The Effects of Codesharing and Antitrust Immunity' (2003) 85 The Review of Economics and Statistics 105 (Brueckner 2003) 107-108.

for the separate segments cannot be eliminated completely. Finally, when the parties fully cooperate on prices and jointly determine them, they achieve the above-mentioned elimination of double marginalisation.

The literature includes extensive discussion of the elimination of double marginalisation in aviation and several studies estimate or (and) quantify the effect of it. Brueckner and Whalen find extremely robust results indicating that airline alliances decrease interline fares, ie the prices connecting passengers pay, by 25% compared to the fares of non-allied airlines.[488] The reduction comes from elimination of double marginalisation which in turn increases demand and thereby traffic on the routes concerned. Increased traffic enables the realisation of economies of traffic density putting further downward pressure on prices. Oum, Park and Zhang also find that complementary alliances are likely to decrease the full price.[489] Airlines tend to adopt more competitive pricing behaviour after entering an alliance. Partner airlines lower their prices by an average of 1.3% in a new alliance to enhance their competitive positions.[490]

Oum, Park and Zhang also examine empirically older cooperations from the early 1990s and find 22 and 19% reductions in the period after the creation of alliances.[491] In a theoretical paper, Brueckner demonstrates what has been shown by the empirical analysis of Brueckner and Whalen, namely that prices on complementary routes decrease while traffic increases, while on routes with a parallel alliance prices increase and traffic decreases.[492] However, when economies of density are accounted for, these can produce price lowering-effects even on the parallel routes.

In a follow-up study based on more recent data, Brueckner extends the results of Brueckner and Whalen.[493] He distinguishes between the effect of code-share agreements and antitrust immunity. The results show that code-sharing reduces prices by 8-17%, antitrust immunity by 13-21%, while the combined effect of the

488 Brueckner and Whalen 2000 (n 383).
489 Oum, Park and Zhang 2000 (n 385).
490 ibid 99.
491 ibid 117. See on the same topic J-H Park and A Zhang, 'An empirical analysis of global airline alliances: cases in North Atlantic markets' (2000) 16 Review of Industrial Organisation 367.
492 Brueckner 2001 (n 383) 1485.
493 Brueckner 2003 (n 487).

two results in a 17-30% drop.[494] Brueckner's other follow-up article demonstrates price decreases of similar magnitude.[495] He finds a 4% effect for simple alliance membership, 7% for code-sharing and 16% for antitrust immunity, totalling a 27% reduction in prices compared to no cooperation.[496]

Whalen also extends these earlier results by using better data for his research and still finds robust results, although with somewhat moderate figures.[497] The results show that alliance prices with antitrust immunity are 18.6-19.5% lower than non-alliance prices, while the same figures for code-sharing are 8.8-10.5%.[498] He also concludes that immunised alliance prices are very close to those prices when one airline offers both legs of the journey (online price). In his 2007 article, Whalen further develops the research of alliance effects on connecting services by using data from an 11-year period that covers the formation and sometimes termination of alliances too.[499] This approach is more robust. As in his previous work, he finds price effects which are smaller but still in the same magnitude. The effect of code-sharing is 5-9%, while that of antitrust immunity 13-20%, while he again shows that immunised alliance fares are close to those of online prices.[500]

In contrast to the above research, Bilotkach applies a different approach and instead of the Cournot-type model, uses a Bertrand competition model.[501] Although he identifies similar effects of airline cooperation, in his model the price decrease for connecting passengers does not depend on antitrust immunity.[502] Instead, price competition between alliances can equally eliminate the double marginalisation effect arising from non-cooperation. Bilotkach's theoretical model finds support from his later empirical research. He argues that the source of the 28-30% total

494 ibid 116.
495 JK Brueckner, 'The benefits of codesharing and antitrust immunity for international passengers, with an application to the Star alliance' (2003) 9 Journal of Air Transport Management 83 (Brueckner 2003b).
496 ibid 86-87.
497 WT Whalen, 'Constrained contracting and quasi-mergers: price effects of code sharing and antitrust immunity in international alliances' (2003) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 03-6.
498 ibid 27-28.
499 WT Whalen, 'A panel data analysis of code-sharing, antitrust immunity, and open skies treaties in international aviation markets' (2007) 30 Review of Industrial Organisation 39 (Whalen 2007).
500 ibid 40.
501 Bilotkach 2005 (n 413).
502 ibid 182.

price-decreasing effect is only alliance cooperation and code-sharing without antitrust immunity.[503] Gillespie and Richard come to similar conclusions about the ineffectiveness of antitrust immunity by analysing transatlantic fare data.[504] Finally, Brueckner, Lee and Singer re-examine the price effects of international alliances, and although they find smaller effects for alliance membership, code-sharing and antitrust immunity, the general price-deceasing effect has gained support.[505]

Besides the most relevant experience of international alliances, the economic literature also includes extensive discussion of US domestic alliances, which concern only code-sharing.

Bamberger, Carlton and Neumann examine the Continental/America West and Northwest/Alaska code-share alliances and find 7.1-8.2% and 5.1-6.1% price-decreasing effects respectively.[506] Even with regard to code-sharing, they mention the elimination of double marginalisation as a potential price benefit. Ito and Lee analyse the US domestic phenomenon of 'virtual code-sharing' where cooperation consists of putting one airline's code on the other's service without providing any segment of the services.[507] They observe lower prices for these services which they associate with the airlines' practice of product differentiation. In a follow-up paper, they confirm this finding and also identify an 11.6% price-decreasing effect from traditional code-sharing that reduces double marginalisation.[508] Armantier and Richard find similar results by showing a price decrease of 3.2% as a result of code-sharing in the Continental/Northwest alliance.[509]

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503 Bilotkach 2007 (n 413). See also V Bilotkach and K Hüschelrath, 'Antitrust immunity for airline alliances: competitive effects and recent policy actions' (2011) 7 Journal of Competition Law & Economics 335.

504 Gillespie and Richard 2011 (n 425) 16.

505 JK Brueckner, D Lee and E Singer, 'Alliance, codesharing, antitrust immunity and international airfares: do previous patterns persist?' (2011) 7 Journal of Competition Law & Economics 573.

506 GE Bamberger, DW Carlton and LR Neumann, 'An empirical investigation of the competitive effects of domestic airline alliances' (2004) 47 Journal of Law and Economics 195 (Bamberger and others 2004) 210 and 214.

507 H Ito and D Lee, 'Domestic codesharing practices in the US airline industry' (2005) 11 Journal of Air Transport Management 89.

508 H Ito and D Lee, 'Domestic codesharing, alliances and airfares in the US airline industry' (2007) 50 The Journal of Law and Economics 355.

509 Armantier and Richard 2005 (n 416) 14.

Increased output

Lower prices through the elimination of double marginalisation lead to increased demand and measured traffic increases. The theoretical models of Brueckner and Bilotkach demonstrate the positive effects on traffic development through better prices being imposed on connecting behind-beyond routes.[510] Empirical results support these findings. Oum, Park and Zhang examine empirical data from transatlantic alliances from the 1990s. Following the formation of complementary alliances, total traffic increased by an average of 11-17%.[511] British Airways/USAir, KLM/Northwest and Lufthansa/United increased aggregate demand on their respective alliance routes confirming that complementary alliances raise total output.[512]

Brueckner and Whalen indicate traffic stimulation by lower prices,[513] while Whalen associates the switch on a route from a non-alliance to immunised services with an increase of 77.2-87.5% in output (21.7-43.7% for code-sharing).[514] The US General Accounting Office (GAO) and the DOT pursued several surveys on the actual effects of airline alliances in the early years of alliance formation.[515] They all observed impressive traffic growth and demand stimulation due to alliances, especially in connecting markets. Finally, concerning the US domestic markets, several studies reached similar conclusions on traffic developments due to airline cooperations in connecting markets. Bamberger and others observe a 6.5% increase of total traffic,[516] just as Armantier and Richard, who estimate 12.3%.[517]

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510 Brueckner 2001 (n 383) 1493; Bilotkach 2005 (n 501) 183.
511 Oum, Park and Zhang 2000 (n 385) 71.
512 ibid 117.
513 Brueckner and Whalen 2000 (n 383) 542.
514 Whalen 2007 (n 499) 55.
515 United States General Accounting Office: International aviation: airline alliances produce benefits, but effect on competition is uncertain (1995), available at: <http://www.gao.gov/assets/160/155012.pdf> accessed 31 December 2012;
US Department of Transportation, Office of Secretary: International aviation developments: global deregulation takes off (1999) (DOT report 1999), available at: <http://www.dot.gov/sites/dot.dev/files/docs/globalderegtake.pdf> accessed 31 December 2012;
US Department of Transportation: International aviation developments: transatlantic deregulation, the alliance network effect (2000), available at: <http://www.dot.gov/sites/dot.dev/files/docs/transatlantdereg.pdf> accessed 31 December 2012.
516 Bamberger and others 2004 (n 506) 215.
517 Armantier and Richard 2005 (n 416) 14.

Economies of traffic density

The increased traffic due to cooperation creates economies of density. These arise when unit cost declines as the volume of traffic carried within an unchanged network increases.[518] The higher volume of traffic enables advantages to be derived from aircraft size and improved utilisation; airlines can achieve higher load factors, and deploy bigger aircraft on the routes with an increased frequency.

Caves and others were among the first to show economies of density for airlines of all sizes.[519] They distinguish between economies of scale and economies of traffic density. While former seems to be constant, they find increasing economies of traffic density.[520] A 1% increase in output leads to a 0.80% increase in cost.[521] In comparing trunk and local airlines' unit costs,[522] they concluded that increasing scale will not change the locals' unit costs, but rather the longer stage length and higher density.[523] Airline alliance cooperation helps to achieve exactly these goals. For example, an Airbus A380 enables operators to usually fly more than 500 passengers (up to 853) to a distance of up to 15 700km.[524] The combination of passengers at hub airports through traffic feed from partners is the key to filling these giant aircraft.

Brueckner and Spiller construct a model which suggests that in the presence of strong economies of density, the elimination of competition on a leg of a hub-and-spoke system increases welfare and lowers prices throughout the system.[525] Accordingly, an alliance between a hub-and-spoke airline and a competitor on feeder routes may improve the cost efficiency of the parties through the achievement of economies of density. Brueckner, Dyer and Spiller test the above model empirically

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518 Holloway 2008 (n 187) 287.

519 D Caves, LR Christensen and MW Tretheway, 'Economies of Density versus Economies of Scale: Why Trunk and Local Service Airline Costs Differ' (1984) 15 RAND Journal of Economics 471 (Caves Christensen Tretheway 1984).

520 ibid 481.

521 ibid 478.

522 Trunk and local airlines were airline types before deregulation in the US. The former operated trans-continental routes with wide-body aircraft, while the latter operated regionally with narrow-body aircraft.

523 Caves Christensen Tretheway 1984 (n 519) 483.

524 See A380 specifications: <http://www.airbus.com/aircraftfamilies/passengeraircraft/a380family/a380-800/specifications/> accessed 31 December 2012.

525 JK Brueckner and PT Spiller, 'Competitions and mergers in airline networks' (1991) 9 International Journal of Industrial Organization 323, 339-341.

and confirm the conclusions.[526] Brueckner and Spiller also identify economies of density which are even stronger than those identified by Caves and others.[527]

Airlines can also realise economies of scale and scope through their cooperation in ground handling, sales, procurement, infrastructure use, IT development, etc.[528] By cooperating within alliances, airlines may realise substantial supply-side benefits in the form of cost efficiencies. In a sufficiently competitive environment they will pass on these benefits to consumers in the form of lower prices and higher output.

6.2.4.2.2 Demand-side benefits

Airline alliances create a lot of benefits that increase consumer convenience and represent actual monetary value, especially for time-sensitive business passengers. These elements improve the service level and try to align it to those comparable with the services of a single operator. They aim to harmonise the consumer experience, irrespective of the airline used or the geographic region concerned.

Airline alliances create new connections, direct routes, alternative routings, higher frequency, and better spread frequencies. The creation of new connections does not require much explanation. For example, the alliance of a US and a European airline immediately creates connections to US domestic destinations for European passengers, which would otherwise not be available due to the regulatory restrictions of air transport. This possibility largely contributed to the widespread use of alliances in aviation. The creation of direct routes may only occur due to the support from the partner airline's traffic feed. Especially on transatlantic markets where the proportion of connecting passengers can be substantial, the increased access to connecting passengers at the other end of a route may provide crucial contribution to the economic viability of the service. For example, before their cooperation began in the early 1990s, neither KLM nor Northwest had direct service to the partner's hub airport.

Sometimes the new service is created by the altered incentives of the partner airlines to do so, because otherwise they would not be interested in entering the route. With a

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526 Brueckner, Dyer and Spiller (n 395).
527 Brueckner and Spiller (n 396).
528 See section 5.3 Forms of cooperation in airline alliances.

simple code-sharing agreement, connecting passengers may be available to the partner airline. However, in terms of routing, own profit-maximising incentives may prove decisive, thereby hindering new services.

A good example is provided by Delta's alliance with Australia's Virgin Blue Group.[529] In this case, Delta operated a direct flight to Sydney from Los Angeles. With only a code-share agreement, they would want to serve any other city in Australia solely indirectly through connections in Sydney. This would mean that the majority of the service is flown on Delta aircraft, so the revenue would remain with Delta. In a revenue-sharing environment, they would want to sell tickets on a direct flight between Brisbane and Los Angeles too. With revenue-sharing, even if Virgin Blue subsidiary V Australia operates the service, the partners are not concerned about the 'metal' used for the service as they would sell tickets on each other's flights. In this way the cooperation can make the operation of new routes viable.

Cooperation within an alliance may substantially increase the available itineraries between the same origin and destination. This means that consumers have a wider choice or, in the case of unexpected difficulties at certain airports, alternative options to still reach their destination on time. Alliances may enable additional frequencies on the routes of cooperation. Elimination of double marginalisation leads to lower prices which in turn stimulate demand. Increased demand justifies additional frequencies.

Even in the absence of additional demand, an alliance allows fare combinability, where the passenger can combine the fares and services of partners on the same route.[530] Suppose a route where airlines A and B both have two daily flights. Without cooperation, a passenger usually does not have the option of combining separate flight legs of different operators or only at prohibitively high prices. The passenger buying an outbound ticket with airline A would have only two inbound options, namely those of airline A. Through the cooperation, passengers may combine the different outbound and inbound services of the partner airlines, in this example the outbound service of airline A can be combined with two additional

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529 ACCC authorisation A91151, A91152, A91172 and A91173 of 10 December 2009 on *Virgin Blue Airlines Pty & others'* application.

530 Transatlantic airline alliance report (n 6) 22.

services of airline B too. Instead of the two return time options, the passenger would have four possibilities.

Cooperation may also allow airlines to spread their frequencies more evenly throughout the day.[531] Revenue-sharing alters the partners' incentives for scheduling; they may choose more optimal timings from the passengers' point of view than in a competitive environment where airlines' objective is profit maximisation based on their own services. More available frequencies and better flight bundles decrease frequency delay, a service improvement highly valued by time-sensitive, business passengers. The net benefit of these service improvements can be determined through the calculation of average time-savings from increased frequencies or flight options and by applying the time values determined in the literature.[532]

Within an alliance, the quality of services is higher for connecting passengers than in a non-allied environment. Even if interlining were available between the services of two airlines in the multilateral IATA framework, the alliance cooperation has many characteristics that make the service better aligned to an airline's own online service. Alliance cooperations aim to achieve a seamless travel experience. The partners can issue a single ticket for the entire journey that involves the segment of the partner airline too. Upon departure, passengers can check-in for all the segments of the journey, so they will have all the necessary boarding cards and do not have to reclaim their luggage at the transfer airport.

The incoming and outgoing flight banks or waves at hub airports are more coordinated between the partners which creates not only shorter connection times, but also shorter total travel times.[533] This again is a service feature which increases quality and reduces the difference compared to the non-stop (direct) services which are usually preferred. The more integrated nature of the service also means that the passenger will be waited for or at least taken care of in cases of delay or other schedule disruptions. Finally, alliance partners also co-locate their services at their

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531 ibid 23.

532 On the value of time saved see for example S Morrison and C Winston, *The economic effects of airline deregulation* (The Brookings Institution 1986) 17-18; SM Nako, 'Frequent flyer programs and business travellers: an empirical investigation' (1992) 28 Logistics and Transportation Review 395 (Nako 1992) 404; K Proussalogou and FS Koppelman, 'The choice of air carrier, flight, and fare class' (1999) 5 Journal of Transport Management 193 (Proussalogou 1999) 200.

533 See section 4.4.5 Airline networks, hub-and-spoke system.

respective hub airports, using the same airport terminal which also decreases connection times and shortens the distances passengers have to walk within the airport.[534] Through all these benefits, passengers can enjoy almost the same level of service as a single airline would provide, just on a much larger, global scale in the spirit of 'from anywhere to everywhere'.

Airline alliances usually also involve some sort of cooperation in relation to FFPs. These programmes started in the US after the deregulation. The first airline that introduced an FFP was American Airlines in 1981 with its programme called 'AAdvantage'.[535] An FFP is actually a loyalty scheme, a type of competition that rewards repeated purchases of passengers by giving them points according to distance travelled and the cabin class chosen. When the passenger has collected sufficient points, he/she can redeem them for free or upgraded tickets, higher allowed baggage weight, lounge access and several other services. As FFPs tend to achieve their objective, empirical studies show that business passengers are heavily influenced by their FFP membership when they decide which airline's service they want to use.[536] They are likely to choose for their own benefit, to build up their FFP points, even if their decision under normal conditions would be different. FFPs can encourage unnecessary travel, or travel at higher fares over more circuitous routings.[537]

One of the main objectives of airline alliances, as previously mentioned, is the integration of partner airlines' FFPs, which means that airlines can offer significantly more destinations for collecting and redeeming FFP points than they actually physically serve. This enhanced FFP is more attractive for business passengers who will have an even more reduced willingness to change airline if they are already member of an FFP. The creation of an alliance can have the beneficial effect of making a switch between airlines more advantageous for the passenger.

An FFP reciprocity agreement between partner airlines would ensure the passengers have the same benefits irrespective of which airline they fly with. The possibility of

534 See part 'Airport facilities' in section 5.3 Forms of cooperation in airline alliances.

535 P Hanlon, *Global airlines, competition in a transnational industry* (3rd ed Butterworth Heinemann 2007) (Hanlon 2007) 86.

536 ibid. See also WG Browne, RS Toh and MY Hu, 'Frequent-flier programs: the Australian experience' (1995) 35 Transportation Journal 35; Nako 1992 (n 532) Proussalogou 1999 (n 532).

537 Hanlon 2007 (n 535) 93.

earning FFP points on all alliance services increases the flight options and the availability of flight bundles just as fare combinability. Accordingly, passengers can derive similar monetary benefits from the cooperation through time-savings. FFP reciprocity also entitles passengers to enjoy the same benefits as provided by the partner airline to its own FFP members. Ie they can enter airport lounges, upgrade services in the partner's network.

Access to airport lounges can be an important benefit on its own. Using hub-and-spoke systems requires passengers to spend considerable time at airports before departure or between the connecting flights. Time-sensitive business passengers place particular value on time spent at airports not being completely wasted so they can work or relax as they wish. Alliance cooperation may provide access to passengers to partner lounges all over the world, extending the number of available lounges significantly.

To conclude, airline alliances can create many benefits for passengers which are directly passed on, immediately after the commencement of any cooperation. These quality improvements, even those that are not expressed in monetary terms, may provide passengers with more value.

6.2.5 Different assessment standards of revenue-sharing joint ventures and airline mergers

As discussed in the relevant parts of Chapter 5, airline alliances often imitate mergers, thereby overcoming international regulatory barriers which still exist.[538] Metal-neutral cooperations in particular try to align the parties' incentives in all possible areas of their operations completely. This form of cooperation involves a high level of integration with substantial investment from the airlines involved.[539] Referring to these circumstances, Kjølbye argues that despite the far-reaching merger-like integration of economic activity, airline joint ventures are treated very differently from actual mergers.[540] Under Article 101(1) TFEU, these joint ventures qualify as an object restriction where the presumption of negative effects prevails, while if they were mergers, authorities would have to demonstrate significant

538 See section 5.2.
539 See section 5.3 Forms of cooperation in airline alliances.
540 Kjølbye 2011 (n 364) 5.

adverse effects on competition. In his opinion there seems to be no reason to apply a stricter standard under the rules on restrictive agreements.

The question arises of whether the more severe treatment can be justified despite the similarities in objectives and effects. In EU competition law, there is a significant difference in the substantive tests of the EUMR and Article 101 TFEU. Although the EUMR applies the 'substantial impediment of effective competition' test, it has been established that most of the problematic cases will continue to be based upon a finding of dominance.[541] Accordingly, the assessment of mergers - just as cases of abuse of dominant position - requires substantial market power as a prequisite. As stated on several occasions, although all instruments of EU competition law are basically concerned with market power, the degree of market power normally required for the finding of an infringement under Article 101(1) TFEU is less than the degree of market power required for a finding of dominance under Article 102 TFEU (or the EUMR).[542] This can be explained by the fundamental differences between a multilateral activity on the one hand, and a merger and unilateral activities on the other.

Although airlines conclude alliances on a long-term basis, these agreements are still limited in time, with the possibility of terminating them at relatively short notice. Mergers, on the other hand, are intended to be of indefinite duration and a permanent change in the marketplace. This influences the member airlines' incentives for long-term commitments and partner-specific investments. Notwithstanding the fact that alliances involve significant commitments from partners, airlines tend to keep alternative strategic options open in case of a derailed cooperation.[543] It is, therefore, not surprising that the aircraft manufacturing industry has not witnessed any significant joint orders from airline alliances thus far and that the largest orders come from individual airlines.[544]

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541 Horizontal merger guidelines (n 229) para 4.

542 Article 101(3) guidelines (n 167) para 26; horizontal cooperation guidelines (n 216) para 42; vertical guidelines (n 216) para 97. See more in detail this issue in L Ortiz Blanco, *Market power in EU antitrust law* (Hart Publishing 2012).

543 K Iatrou, *Airline choices for the future from alliances to mergers* (Ashgate 2007) (Iatrou 2007) 138.

544 The single largest aircraft order was placed in 2012 by American Airlines for a total of 460 aircraft from Airbus and Boeing. See <https://www.aa.com/i18n/amrcorp/newsroom/fp_amr_fleet_agreement.jsp> accessed 31

In this regard it is also relevant that an agreement does not result in any change in control. None of the parties acquires control over the partner. Partners retain their independence as legal entities. Although alliances operate with numerous committees which include different levels of management personnel, these function in a manner similar to the forums of cooperation responsible for coordinating member airlines' activities. The joint venture itself never decides on behalf of the member airlines, nor does it exert control over the combined assets of these airlines.

Separate management boards remain in charge of each airline subject to their own interests, declared or hidden agendas and financial capabilities. The extensive coordination does not change this setting. As a consequence, although metal-neutral cooperation substantially aligns the airlines' market incentives, it will never achieve a level of integration identical to that of a merged entity under the control of a single management board. The consultative decision-making of alliances compared to the hierarchical control of undertakings decreases the potential of efficiencies arising from asset integration. At the same time, their effects arising from elimination of competition are comparable.

As mentioned above, it is often argued that alliances are simply merger substitutes, where the partners are bound to cooperate and they would immediately merge provided the legal environment would allow it. Consequently, they represent just another form of concentration, which should be treated in the same, generally lenient, way. However, several examples provide evidence to the contrary. As discussed in Chapter 5, as the level of integration increases, alliances become more lasting and the partners become interdependent.[545] On the other hand, alliances can be disbanded even at these stages. The recent example of British Airways and Qantas provides an excellent example of this. The two airlines have been in close relationship since 1995[546] and in a revenue-sharing metal-neutral alliance for over a decade.[547] In September 2012, however, the long-standing alliance between the

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December 2012.

545 See section 5.4.

546 See ACCC authorisation A90595 of May 1995 on *Qantas' and British Airways' application*.

547 ACCC authorisation A30202 of 10 May 2000 on *Qantas' and British Airways' application*; ACCC authorisation A30226 and A30227 of 8 February 2005 on *Qantas' and British Airways' application*; ACCC authorisation A91195 and A91196 of 31 March 2010 on *Qantas' and British Airways' application*; ACCC authorisation A91265 and A91266 of 29 September 2011 on *Qantas' and British Airways' application.*

parties was terminated and Qantas chose Emirates as its new partner.[548] Merger activity may also result in significant changes in alliance memberships, leading airlines to switch alliances.[549]

The research by Iatrou offers interesting insights in the differences which exist between the two forms of concentration.[550] He carried out a survey among alliance member airlines with a response rate of 97%. Even at the time of the survey in 2006, almost 90% of the respondents found consolidation to be an inevitable trend.[551] Despite this clear indication, however, over 60% considered that alliances would either stay as they are (35%) or would develop and move to closer integration without proceeding to mergers (26%).[552] When asked about the role of alliances in their strategic plans, only 6% considered mergers to prevail over alliances, while the majority answered that alliances were more important (36%) or equally as important as mergers for the future (36%).[553]

With regard to the positive effects, mergers clearly seem to outweigh alliances in most categories, even if the questions did not concentrate on the comparison of metal-neutral cooperations and mergers.[554] Iatrou concludes that alliances fail to produce significant benefits in the area of cost synergies compared to mergers.[555] Hierarchical control within a firm enables the rationalisation or commitment needed for the decisions with most impact on costs. Metal-neutral alliances close this gap in potential cost synergies definitely by aligning incentives. Nevertheless, the cooperative nature of alliances hinders the complete elimination of the gap.

The lack of change in control also deprives society of other beneficial effects associated with mergers. Alliances can also facilitate the spread of superior managerial or technical skills, although the potential of mergers for this seems higher

548 Pending ACCC case A91332 & A91333 *Qantas Airways Limited & Emirates*.
549 See eg the discussions of a merger between US Airways and troubled American Airlines, which could make US Airways leaving the Star Alliance. Continental Airlines left SkyTeam to become a Star Alliance member just to merge shortly afterwards with United Airlines. As discussed in Chapter 2 the merger of LAN and TAM will also redraw the alliance landscape.
550 Iatrou 2007 (n 543) Chapter 8.
551 ibid 194.
552 ibid.
553 ibid 195.
554 ibid.
555 ibid 196.

due to the hierarchical control.[556] The positive management incentivising effect of possible hostile takeovers also cannot prevail in a cooperation, just like freedom of easy entry and exit to/from an industry.[557] Mergers are always more costly and time-consuming to implement. United and Continental announced their merger on 3 May 2010, but the two airlines operated under their different operating licences till March 2012, and even after this date full integration has yet to be completed totally.[558] In contrast to this, a horizontal agreement, such as an alliance is quicker and cheaper to realise. Therefore any potential anticompetitive objectives can be made more profitable and accordingly more tempting for airlines. Furthermore, even the most integrated metal-neutral alliances can easily involve more than two airlines, which rarely occurs in a merger case. In their widest form, all three global alliances include a double digit number of airlines. This also increases the potential for more negative effects.

Given the fact that merger analysis relies mainly on dominance, the differences between agreements and unilateral conduct also provide explanation for the diverse assessment. Although the Commission is not required to show future abuses of a dominant position in its investigations under the EUMR,[559] it aims to prevent substantial increases in market power and mainly raises concerns about creating, or strengthening of a dominant position. The merged entity would take control of all the assets of both merging parties and decide internally on prices, output, investment based on the directions of a single management board. A merged entity would have the incentive to eliminate non-efficient parts of its own internal organisation, and it would also possess the necessary means to achieve that.

In an alliance, as discussed above, any decision is the result of extensive coordination between separate legal entities, where management boards have their own agenda. The analysis examines the market situation post-transaction with a view to the future and not as a constant collusion based on the merger contract between independent undertakings. While mergers have other beneficial functions in an

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556 Gellhorn 2004 (n 278) 404.

557 ibid.

558 See eg Reuters' UPDATE 4 - United Continental profit hit by integration costs, available at: <http://www.reuters.com/article/2012/07/26/unitedcontinental-results-idUSL4E8IQ49E20120726> accessed 31 December 2012.

559 See *GE/Honeywell* (n 225) para 304.

economy, they may distort competition if they acquire substantial market power. Absent substantial market power, therefore, they rarely raise any problems.

Agreements between direct competitors, on the other hand, are always suspicious and only permitted on the grounds that they create benefits. With regard to certain practices, this approach entails a presumption of negative effects due to procedural efficiency reasons, while in other cases the threshold for raising concerns is simply lower. All these circumstances justify a different approach to airline alliances compared to mergers despite the substantial similarities between the effects of these two forms of concentration. Finally, the different treatment of alliances compared to mergers is not derived solely from the potential object classification of certain airline practices. Even in an effect case under Article 101(1) TFEU, the party alleging an infringement has to demonstrate a lower degree of market power than in a merger case.[560]

6.2.6 Airline alliances under Article 101(1) TFEU

In the section on market definition, it was concluded that defining the relevant market seeks to restrict attention to those services which have a significant impact on competition.[561] Therefore, for the purposes of competition law analysis, airline competition takes place in O&D city pairs. This method was considered the most appropriate way to capture competitive effects, even if this means that some other aspects form part of the competitive assessment only at a later stage. Consequently, as a starting point of any analysis, those routes where concerns can be raised as a result of the alliance agreement have to be identified: these are the affected markets. The Commission's practice is to distinguish between overlap and non-overlap routes. This corresponds to the distinction between routes with actual and potential competition concerns.

On overlap routes prior to the creation of an alliance, parties operate in direct competition and are actual competitors. In non-overlap markets prior to an alliance, only one of the parties operates, while the other airline is a potential competitor. Within overlap routes, the practice differentiates between direct-direct, direct-

[560] See references in (n 542).
[561] See section 6.1 Market definition in air tansport cases.

indirect and indirect-indirect overlaps.[562] A direct-direct overlap indicates an overlap between the parties' non-stop (direct) services, while direct-indirect between the non-stop (direct) and one-stop (indirect) services. Finally, indirect-indirect refers to thin routes where none of the parties provide a non-stop service. Within non-overlap routes the *AF/Alitalia* decision identifies routes linked to the hub of the operating party, non-overlap routes linked to the hub of the non-operating party and routes not linked to any hubs.[563] In an alliance case, this method can lead to a large number of affected markets and each can include a different route of concern which has to be investigated individually.

To decide whether an alliance agreement restricts competition under Article 101(1) TFEU, it is necessary to examine whether it has an object or effect which restricts competition. Following the case law of the Union Courts the precise purpose of the agreement first needs to be considered in the economic context in which it is to be applied.[564] 'The competition in question must be understood within the actual context in which it would occur in the absence of the agreement in dispute'.[565] The restriction of competition 'must result from all or some of the clauses of the agreement itself'.[566] If it can be inferred 'merely from a reading of the terms' of the agreement that it restricts competition, then it may have the object of restricting competition.[567] To that end, close regard must be paid to the objectives which it intended to attain and the wording of its provisions.

Although all alliance joint ventures asked for a confidential treatment of the agreements that serve as a basis of their metal-neutral cooperation, their antitrust immunity applications in the US reveal the essence of these agreements. For example, the oneworld parties described the agreement as a means of removing 'each carrier's incentive to act opportunistically in ways that inure to the short-term financial benefit of one carrier, but which reduce the efficiency and consumer benefits delivered by the alliance. By broadly sharing revenue on a metal-neutral foundation, the JBA will ensure that each carrier acts for the benefit of – and is

562 Gremminger 2003 (n 69) 75.
563 *AF/Alitalia* (n 20) para 113.
564 *STM* (n 169) 249.
565 ibid.
566 ibid.
567 See case T-168/01 *GlaxoSmithKline Services v Commission* [2006] ECR II-2969 (*Glaxo 2006*) para 147.

compensated for its contribution to – the alliance as a whole.'[568] SkyTeam refers to the creation of common economic interests through the alignment of economic incentives.[569] Finally, the Star Alliance highlights the indifference of partners as to which airline's aircraft carries the passenger, as each airline will focus on winning customers for the joint venture.[570]

This alignment of incentives is achieved through the coordination of prices, capacity, schedules, network planning, marketing and sales, FFPs and revenue-sharing, ie all the relevant parameters of competition. From these descriptions it can be seen that the partner airlines undertake all possible means to eliminate their incentives on the market and focus on the common interest of the alliance, namely to behave as a single entity. They no longer determine independently the policy they intend to adopt on the market; indeed, all competition parameters are affected by coordination.

The whole concept of metal-neutrality and incentive alignment 'conflicts patently with the concept inherent in the [TFEU] provisions relating to competition' since they substitute full cooperation for the risk of competition that would occur due to the different incentives of individual airlines.[571] The fact that partners aim to align their incentives suggests that, absent the agreement, they would compete. The mere wording of these agreements and the whole structure of the cooperation reveals the object of restricting competition. By their very nature these agreements intend to restrict competition. In addition, 'the means put in place to attain the objective […] include restrictions whose object is anti-competitive',[572] eg price and capacity-fixing.

Although a restriction by object may be presumed based on the wording of these agreements, the examination of the economic and legal context of which it forms a part may not be entirely dispensed with.[573] However, the legal and economic context does not reveal anything to the contrary. They do not include any factors that would

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568 Joint application of American Airlines, British Airways, Finnair, Iberia, Royal Jordanian Airlines for approval of and antitrust immunity for alliance agreements (Docket OST-2008-0252-0001) 11.

569 Joint application of Alitalia-Linee Aeree Italiane SpA, Czech Airlines, Delta Air Lines, KLM Royal Dutch Airlines, Northwest Airlines, Société Air France for approval of and antitrust immunity for alliance agreements (Docket OST-2007-28644-0001) 6.

570 Joint application to amend order 2007-2-16 to approve and confer antitrust immunity on certain alliance agreements (Docket OST-2008-0234-0001) 7.

571 *Beef Industry* (n 136) para 34.

572 ibid para 36.

573 *Pierre Fabre* (n 174) opinion of AG Mazák paras 25-27.

be 'capable of casting doubt on the existence of a restriction of competition'.[574] What this demonstrates is merely the pro-competitive potential of these agreements and the advantages they can provide under certain circumstances. They can create both supply-side and demand-side benefits, or remedy some of the legal shortcomings of the international regulatory framework.

Nevertheless, these are effects to be taken into account only under the analysis of Article 101(3) TFEU.[575] Metal-neutral cooperation may be necessary for achieving a particular level of efficiencies; however that would be an issue for consideration in relation to indispensability under the third condition of Article 101(3) TFEU. Attaining these benefits may even be a parallel aim of an agreement but nothing in the legal and economic context suggests that the complete elimination of all incentives to compete would not be at the same time an elimination of competition.[576] For the purposes of Article 101(1) TFEU, the relevant aspects are those contributing to the restriction of competition or those that would cast doubt on it. These conclusions should not prejudice the analysis under Article 101(3) TFEU in any way.

Airline alliances can be best described as production agreements, where airlines cooperate to create the joint alliance product. The Commission's guidelines on horizontal cooperation agreements deal with production agreements. Under these rules, agreements involving price-fixing, output limitation, or sharing markets should be generally classified as restrictions by object.[577]

The guidelines contain two exceptions from this general approach. An effect analysis is required either if the parties agree on the output directly concerned by the production agreement, provided that the other parameters of competition are not eliminated; or when a production agreement sets sales prices for the joint product, provided that the cooperation also includes distribution and the parties would not otherwise have an incentive to enter into the agreement.[578] Revenue-sharing joint ventures do not satisfy these conditions. As previously discussed, these alliances

574 *Beef Industry* (n 41) opinion of AG Trstenjak para 55.
575 ibid paras 56-58.
576 See eg *Beef Industry* (n 41) para 21; *General Motors* (n 185) para 64.
577 Horizontal cooperation guidelines (n 216) para 160.
578 ibid para 161.

eliminate all parameters of competition and align member airlines' incentives completely. It is also not fulfilled that without the cooperation on distribution the parties would not have entered the metal-neutral cooperation in the first place.

With regard to possible theories of harm, the guidelines mention direct limitation of competition between the parties. The production joint venture may lead to the alignment of output, quality, prices for the joint venture product or other competitively important parameters.[579] By cooperating, metal-neutral joint ventures succeed in achieving their aim of producing these effects. The guidelines also refer to the possible coordination of competitive behavior and foreclosure of third parties as potential competition risks.[580] In the previous discussion of negative effects it was noted that airline alliances may foreclose competitors by not providing access to traffic feed(s) at their hub airports.

Although the Commission has investigated several alliance agreements over the years and investigates or investigated all three metal-neutral transatlantic joint ventures, the decisions are few and relatively old. With the exception of the oneworld case,[581] there are no recent decisions which would provide specific guidance for airline cooperations in the system of legal exception introduced by Modernisation in 2004.

The 1995 general cooperation agreement between SAS and Lufthansa is not classified either as an object or effect restriction. The decision refers only to appreciable restriction of competition due to the extensive cooperation on capacities, frequencies, fares and marketing through a joint venture.[582] A few years later, concerning Lufthansa's and Austrian's joint venture, the Commission concludes again that the parties restrict competition without making any reference to restriction by object or effect.[583] However, it can be argued that the limited analysis presented in the decisions, and the fact that both cases involve joint ventures and cooperation on all important competition parameters suggests that these cases are object cases.

A slightly different approach can be seen in the case of *British Airways and SN*

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579 ibid para 157.
580 ibid paras 158-159.
581 A commitment decision only with no firm conclusions.
582 *LH/SAS* (n 16) para 50.
583 *AuA/LH* (n 19) para 76.

Brussels Airlines, where the Commission finds that, due to cooperation on prices, schedule and frequency across the parties' network competition is restricted 'in principle'.[584] In the *British Airways, Iberia and GB Airways* alliance case, the Commission uses a different wording when it states that 'there is no doubt' concerning the restriction of competition.[585] Since the cooperation involves prices, sales, revenue and cost sharing, and coordination on frequencies, schedules and capacity, the Commission concludes that all competition will end between the parties.

Again, the circumstances of these cases and the wording used suggests restrictions of competition by object even if these are not mentioned explicitly. Finally, in the case of *Air France/Alitalia*, the Commission expressly uses the terminology that the agreement has the object of restricting competition.[586] The parties cooperate on prices, share revenue and aim to achieve a very close integration of key competition parameters, therefore the Commission concludes that as a matter of fact and law all competition is eliminated.

In its commitment decision on the oneworld joint venture, the Commission refers to a preliminary conclusion of potential restriction by object since the extensive level of cooperation eliminates competition on key parameters of competition. Consequently, the agreements aim at restricting competition by their very nature.[587] The Commission seems to follow the same approach in its ongoing investigation of the Star Alliance.[588]

The Commission's practice, even if not always explicit, seems to suggest that these types of close cooperations restrict competition by object, notwithstanding their clear potential for efficiencies. In the phrasing of the horizontal guidelines, horizontal co-operation agreements can lead to substantial economic benefits, be a means to share risk, save costs, increase investments, pool know-how, enhance product quality and variety, and launch innovation more quickly. As discussed in the section on effects of alliances, cooperation in the airline industry may produce exactly these benefits,

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584 *BA/SN* (n 19) para 42.
585 *BA/IB/GB* (n 19) para 37.
586 *AF/Alitalia* (n 19) paras 105-107 and 129.
587 *BA/AA/IB* (n 20) para 33.
588 *AC/CO/LH/UA* (n 20) para 5.

however, the negative and positive effects appear at the same time in most cases. This raises the issue that the category of object restrictions is wider than just hardcore restrictions with no redeeming virtues. Kjølbye sees a tendency towards a widening of the object category compared with the more effects-based approach of the previous horizontal guidelines, which he considers a development to make life easier for the Commission.[589] Jones also finds it problematic that the object category is relatively broad, claiming that this area of law is left behind by Modernisation and the more economic approach.[590] Finally, the judgments of the Court of Justice in *Beef Industry*, *Glaxo* and *T-Mobile Netherlands* are also regarded by many as reverting to formalism, where the effect analysis of the more economic approach is wrongly avoided.

By using the example of airline alliances it can be demonstrated that the above criticism regarding the definition of object restrictions is not necessarily legitimate. The criticism emphasises the distortive consequences of object classification for the outcome of the Article 101 TFEU analysis as a whole, and refers to the resulting inefficiency in the enforcement of EU competition law.[591] The risk of false positives arises when undertakings intentionally avoid object restrictions and choose suboptimal forms of cooperation due to the fear of condemnation and fines. As discussed earlier, the object/effect dichotomy seems to serve the more economic approach and contributes to minimising false positives and false negatives at reasonable costs.[592] Classification as an object restriction without analysis of effects initially shifts the burden of proof to the parties to the agreement complained of. It does nothing more, however, than to change the usual order of adducing evidence. This reflects the policy decision that certain agreements should be allowed only if accompanied by proven efficiencies.

The metal-neutral airline joint ventures examined previously show potential for efficiencies, although it has also been demonstrated that they can have serious negative effects and eliminate all competition between the partners. It can be accepted that the parties must first demonstrate the existence of efficiencies, considering the legitimate concerns towards horizontal collusions and the justified

589 Kjølbye 2011 (n 364) 6.
590 Jones 2010 (n 367).
591 Kjølbye 2011 (n 364) 6; Jones 2010 (n 367) 675.
592 See section 6.2.3.2.2.

lower threshold for policy interventions in this area. In the same spirit, considering the nature of these restrictions, it is also acceptable to attribute any evidentiary failure to the undertakings party to the agreement even if this leads to infringements in the absence of any market power and therefore significant effects. This is a policy decision in order to achieve administrability.

Should the parties discharge the burden of demonstrating efficiencies, this shifts back to the party alleging the infringement, who in turn has to demonstrate an existing likelihood of negative effects, not just mere presumptions. The balancing of negative and positive effects occurs only after the successful fulfilment of this task. This is because an object classification merely shifts the burden to the other party, ie reverses the usual order for adducing evidence, but does not enable the party alleging the infringement to argue for prohibition without demonstrating allocative inefficiency.[593] This necessitates effective assessment of the likely negative impacts on competition before the final balancing.

However, such an allocation of the burden of proof would serve no purpose if any of the parties faced an insurmountable difficulty in meeting the standard of proof. In relation to object restrictions this translates into the necessity that benefitting from the application of Article 101(3) TFEU should not simply be a theoretical possibility but rather a realistic outcome. There should not be any presumption of illegality under Article 101(3) TFEU against object restrictions nor any evidentiary requirements that would make it virtually impossible to demonstrate efficiencies. The application of Article 101(3) TFEU should stand on its own where its only connection to the Article 101(1) TFEU analysis should be that the latter's outcome results in the need to examine the conditions of the former.

In the following section, the application of Article 101(3) TFEU will be considered in light of the requirements discussed above to ensure an administrable enforcement system.

6.2.7 Assessment under Article 101(3) TFEU

The application of Article 101(3) TFEU is crucial for the enforcement of the Article

[593] See *Glaxo* (n 174) para 83.

as a whole, due to its symbiotic relationship with Article 101(1) TFEU. These two paragraphs should therefore play a balanced role in the analysis of competition under Article 101 TFEU, with the burden of proof allocated in such a way as to avoid both false positives and negatives. In other words, each paragraph should have a separate role. Considering the object restriction determined in the alliance cases examined previously and the large potential for efficiencies arising from these cooperations, Article 101(3) TFEU has to ensure that such benefits are taken into account properly.

Criticism of the wider application of object restrictions refers mainly to the concern that it would lead to false positives. Using the example of airline alliances, which clearly have potential for efficiencies, an object classification may distort the outcome of the analysis, because of the prejudice against object restrictions under Article 101(3) TFEU and the difficulty of proving all four of the provision's conditions. Accordingly, the inherent difficulty of object restrictions benefiting from the Article 101(3) TFEU exception raises questions about the correctness of the object classification in the first place.[594]

These views are not without reason. The Article 101(3) guidelines, besides stating that *a priori* no type of agreement is excluded from the scope of the Article, strongly suggest that severe restrictions (black listed and hard core restrictions from block exemption regulations) do not benefit from its application.[595] The guidelines aim to define a fairly narrow scope of Article 101(1) TFEU with a correspondingly narrow scope of Article 101(3) TFEU.[596]

At the same time, paragraph 47 of the current vertical guidelines expressly refers to the possibility of exempting hard core (or, more specifically, 'object') restrictions, but also sets a presumption against them. In its submission to the 2011 OECD Global Forum meeting, the Commission examines in detail the possible use of the legal exception under Article 101(3) TFEU in the case of crisis cartels based on its amicus curiae opinion given in the national proceedings of the *Beef Industry* case.[597]

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[594] eg Bailey 2012 (n 319) 595, the author refers to the opinions that doubt whether restrictions by object can ever satisfy the conditions of Article 101(3) TFEU; Jones 2010 (n 367) 670.

[595] Article 101(3) guidelines (n 167) para 46.

[596] Kjølbye 2004 (n 342) 570.

[597] Contribution from the European Union (DAF/COMP/GF/WD(2011)20), available at: <http://ec.europa.eu/competition/international/multilateral/2011_feb_crisis_cartels.pdf> accessed 31 December 2012.

This can cause some confusion as to the policy line to be followed. Another legitimate argument raised is the fact that in the system of legal exceptions, where the enforcement of EU competition law focuses on the pursuit of cartels, there are hardly any decisions which would shed light on the issues.[598]

Finally, several commentators refer to the increased standard of proof introduced by the Article 101(3) guidelines for efficiency arguments compared to the practice of previous decades. The Commission's effort to create a narrower and more realistic scope of Article 101(3) TFEU resulted in a highly detailed quantitative process. The party arguing the creation of efficiencies has to demonstrate the nature, the likelihood and magnitude of the efficiencies, as well as their link with the agreement in question and the timeframe and method of realisation.[599]

Lugard and Hancher argue that the framework for assessing efficiencies goes significantly beyond the requirements of the past.[600] They doubt whether in practice there is a realistic possibility for undertakings to argue efficiencies under the new test.[601] They find the issue especially problematic considering that the previous jurisprudence becomes less useful and for the future there will not be further guidance. Bourgeois and Bocken speak about a dauntingly high standard of proof, which will be impossible to meet unless at great cost.[602] Pheasant and Rab summarise the experience of the first five years of applying the new rules and describe the standard as 'intimidating' for parties.[603] At the same time, Faull and Nikpay emphasise that assessing efficiencies is far from being an exact science, therefore 'the obligation imposed is one of best efforts'.[604]

The application of Article 101(3) TFEU and its elements will be analysed against the

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598 Jones 2010 (n 367) 669; Bailey 2012 (n 319) 598.

599 Article 101(3) guidelines (n 167) para 51.

600 P Lugard and L Hancher, 'Honey, I shrunk the Article! A critical assessment of the Commission's notice on Article 81(3) of the EC Treaty' (2004) 25 European Competition Law Review 410, 419.

601 ibid 420.

602 J Bourgeois and J Bocken, 'Guidelines on the application of Article 81(3) of the EC Treaty or how to restrict a restriction' (2005) 32 Legal Issues of Economic Integration 111, 120-121.

603 J Pheasant and S Rab, 'Assessing efficiencies under Article 81(3) – Is the bar getting higher?' (2009) Hogan & Hartson Antitrust Alert 9, available at: <http://www.hoganlovells.com/files/Publication/385c9358-39e2-4144-a252-120906e59ca0/Presentation/PublicationAttachment/e3fe19cf-da47-4a7d-b0f2-1afbeace55cd/Efficiencies_under_Article_81.pdf> accessed 31 December 2012.

604 Faull and Nikpay (n 192) para 3.433.

above background by concentrating on the specificities of this analysis in relation to airline alliances. Article 101(3) TFEU establishes four conditions that have to be fulfilled by the parties claiming the benefits of its application. There are two positive conditions, namely:

> (a) the agreement must contribute to improving the production or distribution of goods or contribute to promoting technical or economic progress,
>
> (b) and consumers must receive a fair share of the resulting benefits.

There are also two negative conditions, namely the agreement must not:

> (c) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives, and
>
> (d) afford the parties the possibility of eliminating competition in respect of a substantial part of the products in question.

All four conditions have to be met therefore it is unnecessary to examine the remaining conditions once an assessment reveals a failure to meet any of them.[605]

6.2.7.1 Efficiencies

Efficiencies have to be objective, verifiable and transaction-specific.[606] As mentioned above, efficiency claims have to provide information on the nature, likelihood, and magnitude of the efficiency, the timeframe and method of expected attainment of the efficiency. The guidelines differentiate between cost and qualitative efficiencies. Cost efficiencies can take the form of synergies, economies of scale and scope, and cost reductions.[607] New or improved goods, services, higher quality, quicker introduction of products or introduction at lower prices can all be qualitative efficiencies.[608] In a number of cases, qualitative efficiencies provide the main source of enhancement potential of the agreement therefore these may be of

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605 Joined cases T-185/00, T-216/00, T-299/00 and T-300/00 *Métropole Télévision SA (M6) and others v Commission* [2002] ECR II-03805 para 86; *Matra Hachette* (n 338) para 104; *VBBB* (n 348) para 61; *Glaxo 2006* (n 567) para 234.

606 Article 101(3) guidelines (n 167) paras 48-51.

607 ibid paras 64-68.

608 ibid paras 70-71.

equal or greater importance than cost efficiencies.[609]

Examining the few cases available publicly, it appears that in the past airlines submitted, and the Commission accepted, mainly qualitative efficiencies under the first condition of Article 101(3) TFEU. The following examples were found for qualitative efficiencies in Commission cases:[610] establishment of a more extensive European network;[611] reorganisation and expansion of the parties' existing network, increased network competition, exchange of know-how;[612] a more competitive network;[613] expanded and improved transatlantic services;[614] complementary networks and improved efficiency;[615] a more efficient, extended network with better connections;[616] an integrated and improved network;[617] complementary networks, new or improved airline services, more efficient use of resources;[618] or a more extensive network.[619] Cost efficiencies were less frequently mentioned, and if referred to, included cost savings, economies of traffic density, and joint purchases.[620]

It is understood that in its latest alliance cases the Commission applies the framework of the Article 101(3) guidelines on efficiencies. For example, in the oneworld case, the parties argued the elimination of double marginalisation and cost savings arising from economies of density as cost efficiency and indicated further qualitative efficiencies in the form of supplying a higher quality schedule, reciprocity of FFPs, fare combinability, and joint corporate contracts.[621] Despite several rounds of discussion, the Commission provisionally concluded that the parties had not produced sufficient evidence demonstrating efficiencies to the required standards.[622] The Commission no longer accepts efficiency claims at face

609 ibid para 69.
610 All cases precede the more economic approach introduced by the Article 101(3) guidelines in 2004.
611 *LH/SAS* (n 16) paras 64-68.
612 *bmi/LH/SAS* (n 107) 7.
613 *LH/SAS/UA* (n 67) para 20.
614 *KLM/NW* (n 68) para 12.
615 *BA/SN* (n 19) paras 55-56.
616 *AuA/LH* (n 19) paras 85-86.
617 *bmi/United* (n 73) paras 125-133.
618 *BA/IB/GB* (n 19) paras 44-45.
619 *AF/Alitalia* (n 19) para 132.
620 *LH/SAS* (n 16) paras 69-73; *LH/SAS/UA* (n 67) para 22; *bmi/LH/SAS* (n 107) 7; *AuA/LH* (n 19) para 87; *BA/IB/GB* (n 19) para 44; *AF/Alitalia* (n 19) para 132.
621 *BA/AA/IB* (n 20) para 78.
622 ibid para 80.

value. In the particular case of oneworld, the parties may have also decided to pursue the commitment path, instead of the detailed analysis of efficiencies, since this provided them with a faster solution. In contrast, Star parties are said to choose the efficiency defence due to the more complementary nature of the joint venture partners' networks.

The benefits of alliances discussed in section 6.2.4.2 may be regarded as efficiencies under Article 101(3) TFEU, where supply-side benefits correspond to cost efficiencies and demand-side benefits to qualitative efficiencies. The most important supply-side benefits are elimination of double marginalisation and economies of traffic density, which both contribute to increased traffic throughout the route network. Double marginalisation arises when absence close alliance cooperation both airlines in a supply relationship mark up the prices they charge their respective partner airline above their repsective marginal cost, which leads to high prices and lower output. When, however, these airlines enter in a close cooperation, these mark-pus are substantially reduced, leading to lower prices for connecting passengers thereby increasing output too.[623] Economies of traffic density arise when unit cost declines as the volume of traffic carried within an unchanged network increases, eg due to close cooperation within an alliance.[624]

Demand-side benefits take the form of newly created or improved connections, alternative routings, higher or better spread frequencies. Efficiencies to consumers are also realised through cooperation of airlines in relation to frequent flier programmes and the increased access to airport lounges.[625]

The analysis of efficiencies raises various issues under Article 101(3) TFEU. The first is the standard of proof for efficiency analysis, and whether the framework of the Article 101(3) guidelines renders it practically impossible to prove the creation of efficiencies. The standard of proof refers to 'the amount and quality of evidence that law requires for a party to prove an allegation',[626] in this example, the amount and quality of evidence on economies of density, scope, scale or other benefits created by airlines' cooperation.

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623 See in detail in section 6.2.4.1 Supply-side benefits - Elimination of double marginalisation.
624 See in detail in section 6.2.4.1 Supply-side benefits - Economies of traffic density.
625 See in detail in section 6.2.4.1 Demand-side benefits.
626 Bailey 2010 (n 261) 363.

Ortiz Blanco considers different standards for different instruments of EU competition law and proposes a reinforced civil standard such as 'firm conviction'.[627] He considers that the Commission applies different standards depending on the type of case.[628] Lowe emphasises the difference between *ex post* and *ex ante* assessment and generally refers to the requirement to produce 'sufficiently precise, convincing and consistent evidence' in support of Commission decisions.[629] He acknowledges that the more economic approach inevitably leads to an increase of the *de facto* standard of proof. However, if combined with *ex ante* guidance, he considers that on balance uncertainty does not increase for the parties.[630] Hellström concludes that the practice points more towards the 'intime conviction' approach, where the emphasis is on the case-by-case convincing nature of evidence rather than a uniform standard of proof.[631] A similar approach is advocated by Gippini-Fournier, who considers 'intime conviction' as a sliding scale with certain explanatory factors that influence the persuasive effect of evidence, ie evidentiary demands.[632]

It is undoubted that, compared to the pre-modernisation decisions of the Commission, the analytical framework of the Article 101(3) guidelines increases the standard of proof and evidentiary requirements. This is particularly true for air transport cases. Cooperation in the airline industry seems to yield potentially significant efficiencies both of a cost and qualitative nature. Considering the potential also for negative effects and the complete elimination of competition involved, it is legitimate to first require the substantiation of any such efficiency claims. Aviation is also characterised by the availability of a myriad of industry data, which enables extensive effect analysis. Under these circumstances, an in-depth examination of efficiency claims and the high evidentiary requirements do not seem excessive in principle.

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627 L Ortiz Blanco, 'Standards of Proof and Personal Conviction in EU Antitrust and Merger Control Procedures' in CD Ehlermann and M Marquis (eds), *European Competition Law Annual 2009* (Hart Publishing 2011) (Ehlermann Marquis 2009) 175.

628 ibid 190.

629 P Lowe, 'Taking sound decisions on the basis of available evidence' in Ehlermann Marquis 2009 (n 627) 157, 167.

630 ibid 169.

631 P Hellström, 'A Uniform standard of proof in EU competition proceedings' in Ehlermann Marquis 2009 (n 627) 147, 155-156.

632 E Gippini-Fournier, 'The elusive standard of proof in EU competition cases' Ehlermann Marquis 2009 (n 627) 295, 302-303.

However, since the adoption of the Article 101(3) guidelines, both the General Court and the Court of Justice had the opportunity to deal with the application of Article 101(3) TFEU which has ensured that its application remains realistic and available for object restrictions too.[633] Völcker considers that the judgment in *Glaxo* upholding the General Court's assessment may invite the Commission to revisit some aspects of the Article 101(3) guidelines.[634]

Although the Court of Justice and the General Court disagreed on the issue of whether the Commission was right to argue an object restriction in its underlying decision,[635] both courts came to the same conclusions on Article 101(3) TFEU. The Commission argued before the Court of Justice that the General Court had committed an error of law in finding it sufficient for an application of the legal exception of Article 101(3) TFEU to argue that efficiency gains may probably occur.[636] The Court of Justice disagreed and considered it sufficient to 'arrive at the conviction that the occurrence of the appreciable objective advantage is sufficiently likely in order to presume that the agreement entails such an advantage'.[637] Given the prospective nature of the analysis, it only has to be assessed whether it seems more likely that the efficiency will be realised.[638]

The AG Trestenjak's opinion referred to a high degree of probability concerning the required likelihood,[639] however neither of the courts mentions this as a decisive factor. The Commission has admitted several times before the General Court that the process is more like a question of probabilities.[640] This suggests that arguing efficiencies remains a realistic process which also incorporates higher standards of the more economic approach. In theory, undertakings are required to meet only reasonably possible requirements.[641]

The Court of Justice has also confirmed that any analysis of efficiency claims must

633 *Glaxo* (n 174); *Glaxo 2006* (n 567).
634 Völcker 2011 (n 362) 185.
635 *Glaxo Wellcome* (IV/36.957/F3), *Aseprofar and Fedifar* (IV/36.997/F3), *Spain Pharma* (IV/37.121/F3), *BAI* (IV/37.138/F3) and *EAEPC* (IV/37.380/F3) Commission Decision 2001/791/EC [2001] OJ L302/1.
636 *Glaxo* (n 174) para 89.
637 ibid para 93.
638 ibid para 94.
639 Para 193.
640 *Glaxo 2006* (n 567) para 302; Faull and Nikpay (n 192) para 3.435.
641 Kjølbye 2004 (n 342) 574.

be undertaken in the light of the legal and economic context of the sector in question.[642] This conclusion proves to be particularly relevant for the efficiency arguments raised by airlines. As discussed previously, for the purposes of competition law analysis, competition involves an O&D city pair, which may consist of non-stop or one-stop routes to the same airports or to airports with overlapping catchment areas.[643] This represents the relevant market where the restriction of competition is established. However, the efficiencies described in the section on the benefits of alliances often appear at a network level, and are not limited to one particular O&D route.

For example, the elimination of double marginalisation and the subsequent increase in traffic density exerts its beneficial effects throughout the whole hub-and-spoke network. As explained earlier, cooperation on part of the network may benefit and contribute to the efficiency of all other connecting spoke routes. Restrictions on hub-to-hub routes may benefit connecting passengers on thousands of other routes, which include the hub-to-hub route as a segment. On a flight between hub airports, the proportion of connecting passengers may even exceed 90% which makes the case for benefits to non-local passengers even more appealing.

The question then arises as to what extent would it be possible to consider these benefits in the balancing process of Article 101(3) TFEU allied to a particular O&D route. It has to be examined whether there is a causal link between the restriction of competition and the efficiency, and whether this link is direct or indirect. The extent to which the benefits in one market can be balanced against the negative effects in another market may therefore become a crucial issue in airline alliance cases.

Paragraph 43 of the Article 101(3) guidelines establishes that 'negative effects on consumers in one geographic market or product market cannot normally be balanced against, and compensated by, positive effects for consumers in another, unrelated geographic or product market' ('out-of-market' efficiencies). The guidelines also provide that the causal link between the agreement and the claimed efficiency must normally be direct.[644] If these requirements are translated to any of the transatlantic

642 *Glaxo* (n 174) paras 102-104.
642 ibid para 93.
643 See section 6.1.
644 Article 101(3) guidelines (n 167) para 54.

alliance joint venture cases, the question remains as to whether the complete loss of competition for local passengers (eg London-New York, Frankfurt-Washington) may be offset or balanced against the benefits to behind-beyond passengers (eg Budapest-Milwaukee).

The Article 101(3) guidelines provide a limited exception to the general rule in paragraph 43 when it refers to related markets and the requirement that the group of consumers affected by the restriction and benefitting from the efficiency should be substantially the same. It is not guaranteed that passengers travelling on the hub-to-hub routes are substantially the same as those using behind-beyond itineraries as well. And even if they are the same, it is not evident how the criteria of 'substantially the same' can be demonstrated in practice. It can be seen that such a test may have serious consequences for the assessment of alliances. Even if numerous consumer benefits are created throughout the network, due to a limited number of O&D routes where negative effects dominate, antitrust intervention substantially affects the whole system of efficiencies. Consequently, in the absence of countervailing benefits in the same relevant market, authorities may prohibit cooperation either just in these markets or completely.

In its antitrust immunity proceedings, the US DOT often applies so-called 'carve-outs' for the problematic hub-to-hub routes, which basically means that the parties' cooperation remains subject to antitrust rules on these routes, and they can cooperate solely on behind-beyond markets.[645] The experience with carve-outs is ambiguous and in its most recent decisions on the three metal-neutral joint ventures, the DOT abandoned the use of such remedies, since they 'inhibit the realization of efficiencies and thereby the consumer benefits resulting from those efficiencies'.[646] The economics and benefits of these cooperations clearly demonstrate network level ('out-of-market') efficiencies that are connected to the restriction of competition on certain routes. A restricted view of efficiencies limited by the boundaries of narrowly-defined relevant markets under competition rules would fail to

[645] For example, in *United/Lufthansa* (Docket OST-1996-1116), Order 96-5-27, the DOT imposed carve-outs on the hub-to-hub routes of Frankfurt-Chicago and Frankfurt-Washington.

[646] eg *United/Brussels Airlines/Lufthansa/Air Canada/SAS/Austrian/bmi/ LOT/Swiss/TAP* (Docket OST 2008-0234), Order 2009-7-10 18-20, see also *American/British Airways/Iberia/Finnair/ Royal Jordanian* (Docket OST-2008-0252), Order 2010-7-8 20-21. See in particular Brueckner and Proost 2010 (n 415).

acknowledge the benefits of these cooperations.

This restricted approach towards out-of-market efficiencies also finds little support in the case law of the Union Courts. The judgments of *Shaw* and *Publishers Association* suggest that the assessment of efficiencies should be made within the same analytical framework as that used to analyse negative effects[647] and in the majority of cases this would also be appropriate. However, other judgments undoubtedly provide the possibility to take into account out of market efficiencies.

In *Compagnie Générale Maritime* the General Court expressly states that, in appropriate cases, regard should be taken of the efficiencies not just in the relevant market but in every other market in which the agreement might have benefits, and even, in a more general sense, for any service the quality or efficiency of which might be improved by the existence of that agreement.[648] The benefit of Article 101(3) TFEU is available for agreements which contribute to promoting technical or economic progress, without requiring a specific link with the relevant market.[649]

The General Court repeated this finding in the *CMA CGM* case.[650] Besides these judgments on maritime transport, both the General Court and the Court of Justice confirmed the possibility of out-of-market efficiencies in *Glaxo*.[651] In the most recent *Mastercard* judgment, the General Court again accepts in principle the concept of out-of-market efficiencies by citing *Compagnie Générale Maritime*, but due to the parties' failure to prove the 'fair share' criteria of Article 101(3) TFEU, it rejects the parties' argument.[652] In the Article 101(3) guidelines, the Commission refers to the fact that although two separate markets were defined in *Compagnie*

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647 Case T-131/99 *Michael Hamilton Shaw and Timothy John Falla v Commission* [2002] ECR II-2023 para 163; case C-360/92 P *Publishers Association v Commission* [1995] ECR I-23 para 29.

648 Case T-86/95 *Compagnie Générale Maritime and other v Commission* [2002] ECR II-1011 para 343.

649 ibid.

650 Case T-213/00 *CMA CGM and others v Commission* [2003] ECR II-913 para 227.

651 *Glaxo 2006* (n 567) paras 248 and 251; In *Glaxo* (n 174) paras 112-121. Völcker argues (Völcker 2011 (n 362) 185) that the Court of Justice accepted that increased profit may go to R&D which may create efficiencies indirectly. Accordingly, in this way the Court of Justice acknowledged to possibility of out of market efficiencies without the limitations contained in the Article 101(3) guidelines. However, it can be also argued that the General Court and the Court of Justice simply criticised the Commission for not examining properly the efficiency arguments offered (para 118 of *Glaxo*). Nevertheless, this can be interpreted as an argument that properly argued and proven out-of-market efficiency claims might be relevant even with less restrictive conditions than paragraph 43 of the Article 101(3) guidelines.

652 T-111/08 *Mastercard and others v Commission* [2012] ECR not yet reported (*Mastercard*) para 228.

Générale Maritime, the customers, shippers, were substantially the same.[653] However, in the subsequent cases of *Glaxo* and *Mastercard*, the customer groups in question are evidently different. In the former case these are customers of different drugs, while in the *Mastercard* case, the different customers are cardholders and merchants.

Accordingly, in view of the proven potential for alliances to create benefits even in the form of out-of-market efficiencies and other indirect economic advantages, the analysis must be undertaken in the light of this legal and economic context of aviation. The overly restrictive paragraph 43 of the Article 101(3) guidelines conflicts with the above case law and disregard the economic and legal reality of the environment airline alliances operate in. Although the theoretical possibility for object restrictions to benefit from the application of Article 101(3) TFEU was stated several times in case law,[654] the Court of Justice's most important message from *Glaxo* is the message it never put down on paper.

Despite the Court of Justice clearly rejecting the idea that the restriction of parallel trade is only an infringement by effect, it upholds the General Court's Article 101(3) TFEU analysis.[655] This confirms that the object classification of a practice under Article 101(1) TFEU has no effect on the outcome of the efficiency analysis under Article 101(3) TFEU. The airline industry provides the example that, even in the case of object restrictions, the benefit of 101(3) TFEU should be, and based on case law, can be available, whenever parties to an agreement present their efficiency claims convincingly, substantiated by detailed analysis of both price and qualitative efficiencies.

As the above review of alliances' negative and positive effects demonstrated, the literature dealt extensively with the empirical analysis of the effects of alliances, which suggests that the more economic approach would work. Most importantly, the more economic approach should not mean an endless debate between economic experts, where the party arguing efficiency claims bears the burden of demonstration to unrealistically high standards. The analysis should take note of the economic and

653 Article 101(3) guidelines footnote 57.

654 See most recently *Mastercard* (n 652) para 199 or *Pierre Fabre* (n 174) para 49 and even *Beef Industry* (n 41) may be considered as case where this possibility was implicitly confirmed.

655 Völcker 2011 (n 362) 184.

legal reality of the industry and require a realistic analysis which acknowledges the circumstances of the case.

6.2.7.2 Fair share to consumers

Under the second condition of Article 101(3) TFEU, consumers must at least be compensated for the actual or likely negative impact caused by the restriction of competition and, as such, the net effect should be neutral.[656] It is not required that consumers receive a fair share of every efficiency, and compensation can take the form of increased quality in exchange for higher prices. Furthermore, under Article 101(3) TFEU, 'it is the beneficial nature of the effect on all consumers in the relevant markets that must be taken into consideration, not the effect on each member of that category of consumers'.[657] This can be interpreted as the effects on the average consumer having to be considered.

The assessment of pass-on is a sliding scale approach where the greater the restriction and the later the pass-on to consumers, the greater the efficiency and the pass-on must be.[658] The pass-on of efficiencies is inevitably related to the fourth criterion of Article 101(3) TFEU, no elimination of competition. If an agreement eliminates competition under the fourth criterion then it is impossible for any efficiencies to be passed on to consumers. However, the reverse situation does not necessarily produce an equivalent conclusion: ie the fact that competition is not eliminated does not automatically entail a pass-on. Residual competition plays a decisive role, and the greater the degree of it, the more likely the efficiency will be passed on.[659]

The Commission prefers a cost reduction in variable and marginal costs as opposed to lowering fixed costs. In any case, the incentive to raise prices arising out of an increase in market power must be balanced against the incentive to reduce prices arising from enhancements in efficiency.[660] The function of the pass-on test is to filter efficiencies not available in the end for consumers, therefore only those efficiencies that actually benefit consumers should be balanced against the negative

656 Article 101(3) guidelines (n 167) para 85.
657 Case C-238/05 *Asnef-Equifax, SISC, SL v Ausbanc* [2006] ECR I-11125 para 70.
658 Article 101(3) guidelines (n 167) para 90.
659 ibid para 97.
660 ibid para 101.

effects.

The actual pass-on of efficiencies produced by alliances varies according to the type of efficiency. Newly-created connections, increased frequencies and better timing immediately benefits passengers, as does reciprocal access to airport lounges and compatibility of FFPs. Given their nature, these efficiencies will be passed on completely irrespective of residual competition.[661]

However, cost efficiencies work in a different way. The elimination of double marginalisation on connecting markets lowers prices thereby increasing demand which helps to achieve economies of density throughout the network. This has a positive effect both on hub-to-hub routes and on the connected behind-beyond routes.[662] Economies of density lower unit costs on these routes. It has to be seen that the cost effects throughout the network are interrelated and any improvement in one part of the network creates positive effects also for other parts.[663] Depending on residual competition, lower unit costs will translate to lower prices for passengers. Subject to the methods used to consider out-of-market efficiencies, the benefits deriving from behind-beyond routes can make a difference in pass-on concerning hub-to-hub routes.

Generally, in the old case law, little has been said about pass-on. In *LH/SAS* for example, paragraph 74 simply states that the consumers will benefit from the higher-quality services, which are geographically more extensive. In the same case, the Commission mentions that conditions have to be imposed to ensure the pass-on of cost reductions, just like it did in *AuA/LH*.[664] In *bmi/LH/SAS*, the parties explain the pass-on by the fact that the alliance itself was created to enhance market position against British Airways on the London market. It is the alliance which allows them to compete more vigorously.[665] *BA/SN* argues for a pass-on because of the wider choice of destination, better scheduling, coordinated gate allocation or FFP benefits generated by the alliance agreement.[666] Finally in *AF/Alitalia*, in addition to the general arguments concerning unit cost reduction the parties were not able to

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661 See in detail in section 6.2.4.1 Demand-side benefits.
662 See in detail in section 6.2.4.1 Supply-side benefits - Elimination of double marginalisation.
663 See in detail in section 6.2.4.1 Supply-side benefits – Economies of traffic density.
664 *LH/SAS* (n 16) para 74; *AuA/LH* (n 19) para 93.
665 *bmi/LH/SAS* (n 107) para 2.
666 *BA/SN* (n 19) paras 57-59.

substantiate their claim.[667]

6.2.7.3 Indispensability

Indispensability requires that a restrictive agreement as such must be reasonably necessary in order to achieve efficiencies. In addition, individual restrictions of competition which flow from the agreement must also be reasonably necessary for the attainment of efficiencies.[668] The relevant question is not whether, in the absence of the restriction, the agreement would not have been concluded, but whether more efficiencies are produced by the agreement or restriction than in the absence of it.[669] Concerning the indispensability of the agreement as such the question is whether there are less restrictive but economically practicable solutions for attaining a similar level of claimed benefits or, to put it differently, whether such a solution would create significantly less efficiencies.[670] It may be necessary to ask whether the parties could have achieved the efficiency on their own.[671]

When assessing realistic and less restrictive alternatives to revenue-sharing joint ventures under the indispensability condition, it is necessary to explore alternatives in at least two directions. Firstly, it must be established whether cooperations of lower intensity actually achieve significantly less efficiencies and whether this would hold true for cooperations of smaller geographic scope. In other words, could a similar level of the claimed efficiencies be achieved for example by a simple code-sharing agreement, or is it necessary to include in the cooperation hub-to-hub routes with high potential for restrictions, ie would behind-beyond cooperation be sufficient? Can the elimination of double marginalisation or economies of traffic density be achieved to the same extent without the full elimination of competition through metal-neutral revenue-sharing airline allinaces? These questions can be decided on a case-by-case basis by considering the specific circumstances.

There is no doubt that several of the demand-side benefits, such as lounge access, cooperation on frequent flier programmes or new connections can be created also by less intensive forms of cooperation. On the other hand, certain efficiencies that

667 *AF/Alitalia* (n 19) para 137.
668 Article 101(3) guidelines (n 167) para 73.
669 ibid para 74.
670 ibid para 75.
671 ibid para 76.

would require the alignment of airlines' economic incentives would not be possible to realise through simple alliance membership cooperations. These include for example better spread frequencies or routes created after joint profit maximisation.[672]

Furthermore, the majority of studies on the economic effects of alliances suggests that full cooperation is needed to be able to eliminate double marginalisation completely, since less intense forms such as code-sharing, produce benefits but these are significantly lower than those produced by revenue-sharing.[673]

Secondly, certain authors, having used different models, concluded that double marginalisation can be almost eliminated by other means such as code-sharing, therefore the more restrictive metal-neutral cooperation is not needed.[674]

Finally, the literature has also dealt with the effects of carve-outs and finds that it might be necessary to include hub-to-hub routes in the cooperation as well; otherwise the parties will still be incentivised to favour their own transatlantic flights, thereby destroying efficiencies.[675]

6.2.7.4 No elimination of competition

The last criterion of Article 101(3) TFEU requires that the agreement must not afford the parties the possibility of substantially eliminating competition. This condition recognises the fact that rivalry between undertakings is an essential driver of economic efficiency and recognises that the protection of rivalry is given priority over potentially pro-competitive efficiency gains.[676] Its application requires a realistic analysis of various sources of actual and potential competition where the starting point is market share, however extensive qualitative and quantitative analysis is required.[677]

Elimination of competition under Article 101(3) TFEU is an autonomous Union law concept that is narrower than that of the existence or acquisition of a dominant

672 See the example of Delta and Virgin Blue's cooperation in section 6.2.4.1 Demand-side benefits.
673 See Brueckner 2003 (n 487); Brueckner 2003b (n 495); Whalen 2003 (n 497); Whalen 2007 (n 499); Brueckner, Lee and Singer (n 505). More in detail in section 6.2.4.1 Supply-side benefits - Elimination of double marginalisation.
674 Bilotkach 2005 (n 501); Bilotkach 2007 (n 503); Gillespie and Richard 2011 (n 425).
675 Brueckner and Proost 2010 (n 415).
676 Article 101(3) guidelines (n 167) para 105.
677 ibid paras 108-109.

position.[678] Its application depends on the competition existing prior to the agreement in question; in a competitive situation which is already weak, even a small reduction of competition can result in the elimination of competition.[679] The analysis requires the assessment of alliance partners' market position, the barriers to entry and the real economic possibilities of competing with the undertakings already established in the market.

This would include analysing the availability of slots at airports on the route and other congestion issues, examining the effects of FFPs, TACOs, CRS effects, possible regulatory barriers to entry (traffic rights), the parties' advantages derived from operating a hub and the likelihood of predatory response to market entry.[680] In this assessment, the aspects dealt with in detail under market definition and the potential sources of competition may be particularly important.[681] It might be relevant how realistic the entry of a competitor with a one-stop service can be and whether a service like this would be attractive enough for business and economy passengers travelling on the route.[682] Analysis may also cover the issue whether entry and services from nearby alternative airports would be competitive enough to provide an alternative to the alliance partners' services.[683]

678 ibid para 106.
679 ibid para 107.
680 See for example *LH/SAS* (n 16) paras 82-85; *AuA/LH* (n 19) paras 96-104; *BA/SN* (n 19) paras 62-74; *BA/IB/GB* (n 19) paras 50-70; *AF/Alitalia* (n 19) paras 142-159.
681 See section 6.1 market definition in air transport cases.
682 See in detail section 6.1.1.3 Non-stop and one-stop flights.
683 See in detail section 6.1.1.2 Airport substitution.

7 Conclusion

Having examined the economic and legal aspects of strategic alliances in general, those of airline alliances with regard to EU competition law, and after considering the features of an optimal enforcement regime, and evaluating the design of EU competition law, the findings of the thesis are summarised. This thesis examines whether, in the light of the more economic approach, it is correct to classify airline alliances as restrictive of competition by object and interpret this concept in a wider sense under Article 101(1) TFEU. By exploring the example of airline alliances and in particular metal-neutral alliances, the thesis argues that the wider interpretation of object restrictions is correct and, as such, does not conflict with the more economic approach of EU competition law. Furthermore, this wider interpretation of object restrictions must be complemented by a realistic application of Article 101(3) TFEU, in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs.

In order to answer the thesis question, the analysis covered the economic and legal aspects of strategic alliances to reveal the general purpose of alliance agreements and whether the economic environment really induces undertakings to cooperate with their competitors in pursuing efficiency enhancements. The aim was similar with the analysis of the same issues in relation to airline alliances. The motivations behind airlines entering strategic alliances and the form of these cooperations were examined. The legal background of the aviation industry facilitates an understanding of the legal framework of alliance formation that contributed to the widespread use of this strategy. It also explains the environment that will ensure that these cooperative forms will stay with us for several more years to come.

The section on the economics of air transportation illustrates the principles that determine the operation of air transport services and provides valuable insights for the analysis under Articles 101(1) and 101(3) TFEU. Without understanding these issues, the analysis would be distorted and the flawed outcome would increase administrative errors, thereby decreasing the efficiency of the enforcement system. The description of market definition in air transport cases sought to explain the nature of competition, and the products that have significant impact on competition between airlines. Finally, with the presentation of the more economic approach and

the idea of optimal and administrable enforcement systems, the thesis outlined what the design of an ideal enforcement practice would look like.

Based on the above analysis, the thesis produced the following findings. Global airline alliances such as Star Alliance, oneworld and SkyTeam are a phenomenon of the globalised economy, a form of strategic alliances that serve the purpose of answering the challenges of the new economic environment. Larger and more open markets with increased domestic and international competition, changing consumer needs, and the gradually and partially dismantled regulatory barriers have all contributed to the increased pressure on network airlines to find an appropriate solution for business success. These strategic alliance agreements can be described as cooperations for mutual benefit, which is intended for a long period, as they pursue strategic aims whilst the partner companies remain independent. A degree of integration of activities is achieved via the contribution of assets or knowledge to the alliance.

Strategic alliances act, in most cases, for the good of consumers in a globalised economy and such cooperation yields substantial benefits. These agreements have legitimate goals to pursue that are not in conflict with the goals of competition policy; on the contrary they can intensify competition and better serve the radically-transformed needs of consumers. It is important to bear these circumstances in mind for the analysis of strategic airline alliances under Article 101 TFEU as they should explain why alliances are good candidates for Article 101(3) TFEU analysis.

The assessment of airline alliances is no different from the general approach in most cases. They profess to facilitating numerous benefits including better flight connections, greater possibility for earning and redeeming miles on all members' FFPs, more destinations, more flights, new and innovative fare products enabling global travel, and better airport experience. More importantly, through their cooperation, airlines also promise to realise various cost efficiencies. Economies of traffic density arise when unit costs decline as the traffic carried within an unchanged network rises. As traffic volume increases, larger aircraft can be used with lower unit costs which can be passed on in the form of lower prices. Economies of scope arise when it is cheaper to produce two products together, rather than for each product to be produced by separate firms. A hub-and-spoke system enables

economies such as these when traffic is channelled through one transfer point. On the outbound and inbound flights, passengers to and from different destinations use the same aircraft and several products are produced together which lowers costs.

Airline cooperation aims to create networks that build on these efficiencies. The creation of alliances usually utilises and reinforces exactly the aforementioned economic principles of air transportation. The logic of airline alliances should be understood against this generally positive background, which is not likely to undergo rapid change for at least the next decade. Alliance strategy appears to offer network airlines a way of addressing the challenges they face at a domestic level. Currently, the broadening and, in particular, the deepening of alliance relationships seems to be an essential part of the network airlines' strategy, whereas in the 1990s entering into alliances seemed to provide little more than a good opportunity for additional revenue flow. If the aforementioned benefits are substantiated in line with the general experience, then strategic airline alliances also pursue legitimate goals and have the potential for creating not insignificant efficiencies, which is an important factor for any competition law discussion of their effects.

Global airline alliances are generally based on a network of bilateral or multilateral agreements between the member airlines, covering most of their activities, including in the areas of code-sharing, network planning, scheduling, sales and marketing, ground handling, airport facilities, frequent flyer programmes, procurement, ticketing and information technologies. The level of integration and cooperation varies depending on the airlines involved, however, all three global airline alliances have created either revenue or profit- sharing metal-neutral joint ventures between core members concerning their key markets. oneworld's joint venture includes British Airways, Iberia and American Airlines, Star Alliance's A++ agreement was concluded originally by Air Canada, Lufthansa, United and Continental, while Delta, Air France/KLM and Alitalia form part of SkyTeam's most integrated way of cooperation over the transatlantic. These highly integrated metal-neutral revenue-sharing alliances eliminate competition between the partners in relation to all competition factors. These forms of cooperation provide examples for discussion of the competition law issues in this thesis.

The legal background of air transport has largely contributed to the creation of the

aforementioned forms of strategic alliances, since notwithstanding considerable achievements in the liberalisation of global aviation, ownership restrictions still hinder certain business options, like mergers between airlines of different 'nationalities'. Partial liberalisation and dismantling of legal barriers on a regional basis has enabled the emergence of business forms (low-cost airlines) that induced the creation or deepening of alliances. In this environment, airlines often use alliances to mimic the effects of legally impermissible mergers. However, even revenue-sharing metal-neutral airline alliances cannot be equated with mergers, since the nature of these two types of transaction is still different. Therefore, it would be erroneous to analyse alliances pursuant to the merger standards within the framework of an Article 101 TFEU investigation. A stricter approach under Article 101 TFEU seems legitimate.

From a competition law perspective, strategic alliances in general receive a benign treatment under EU competition law which acknowledges the afore-mentioned globalised environment's requirements for quick adaptation and more efficient operations from undertakings. EU competition rules do not apply special rules to strategic alliances. In contrast, revenue-sharing metal-neutral alliances warrant more scrutiny due to the intensity of cooperation involved, since incentives are completely aligned between partner airlines to make them completely indifferent as to who serves the customer.

Against this background, the issue of the more economic approach of EU competition law and administrability of efficient enforcement systems was examined in relation to the interpretation of the object and effect dichotomy of Article 101 TFEU. The more economic approach implies a strengthened role of economic analysis, thus a departure from the legalistic, form-based assessment to an effects-based economic approach with an increased focus on consumer welfare. The question was raised of whether the wider interpretation of restriction by object and categorisation would be in conflict with the idea behind the more economic approach. It was concluded that the more economic approach does not exclude the application of categorising rules such as restriction by object. In fact, precisely because of the more economic approach and the attempts to minimise the total cost of false positives and negatives and the system itself requires that in certain cases

generalised rules are applied as opposed to a case-by-case assessment. Accordingly, an administrable and efficient enforcement system combines elements of these two methods (categorisation and case-by-case), and applies a flexible approach to accommodate the characteristics of different categories of potentially illegal conduct.

Such a system would not require a detailed economic assessment in all cases, but rather applies filters, presumptions and informational shortcuts to preserve administrative or judicial efforts, and avoid losses in procedural efficiency and the costs of unnecessarily detailed investigations. Ideally, these filters, presumptions and informational shortcuts are elaborated on the basis of mainstream economic thinking and general experience of particular types of business behaviour. They should work as generalised conclusions of economics. The allocation of the burden of proof, and the standard of proof, required should reflect the authority's perception and evaluation of potential false positives and negatives. The way the system is constructed is a policy matter.

The bifurcated structure of Article 101 TFEU, and the consequence that restriction by object or effect forms part of Article 101(1) TFEU, while both forms of restriction can benefit from the legal exception under Article 101(3) TFEU, aligns the existing system with the aforementioned ideal system from an administrative and procedural efficiency point of view. The object/effect distinction of Article 101(1) TFEU provides flexibility to save administrative resources in certain cases. At the same time, it enables that whenever agreements with anticompetitive effects also demonstrate potential for substantial efficiencies, the cooperation may survive the scrutiny by competition authorities. The object classification reflects the policy choice that certain practices might be allowed only if accompanied by proven efficiencies. Otherwise, this category of practices is regarded as undesirable, even in the absence of actual effects, simply due to the fact that it is restrictive of competition by object (risk offence nature).[684]

Therefore, classification as an object restriction initially shifts the burden of proof without analysis of effects to the parties to an agreement complained of. It does nothing more, however, than to change the usual order of adducing evidence. The consequences of any evidentiary failure in this respect should be attributed to the

[684] See the opinion of AG Kokott in case C-8/08 *T-Mobile Netherlands* [2009] ECR I-4529 para 47.

undertakings party to the agreement with the object of restricting competition. Should they discharge this burden, it shifts back to the party alleging the infringement, who in turn has to demonstrate an existing likelihood of negative effects rather than mere presumptions. The balancing of negative and positive effects occurs only after the successful fulfilment of this task. In sum, object classification under Article 101(1) TFEU provides more of an inconclusive burden-shifting presumption that can be rebutted by the demonstration of pro-competitive effects under Article 101(3) TFEU. The EU system in this form seems to serve the more economic approach and contribute to minimising false positives and false negatives at reasonable costs.

However, this interpretation has to be complemented by a realistic application of Article 101(3) TFEU in order to achieve the desired outcome of an administrable and efficient enforcement regime that minimises error costs. Neither the role and proper interpretation of object restrictions nor the Article 101(3) TFEU analysis can be discussed without due regard to the symbiotic relationship between the two. The increased use of restriction by object should not distort the outcome of the analysis under Article 101(3) TFEU due to any prejudice against object restrictions or claimed difficulty of proving all four conditions of that provision.

In relation to object restrictions, this translates into the requirement that benefitting from the application of Article 101(3) TFEU should not be just a theoretical possibility but rather a realistic outcome provided the four conditions of that paragraph are proven. The application of Article 101(3) TFEU should stand on its own and not be predetermined by any conclusions reached under Article 101(1) TFEU. The case law of the Union Courts and in particular the Court of Justice's judgment in *Glaxo* supports this view. Accordingly, the wider interpretation of restriction by object would not place undertakings in any difficulty, since the appropriate argumentation of efficiency arguments would enable the cooperation to benefit from the application of Article 101(3) TFEU.

Strategic airline alliances provide an excellent example and demonstrate the above conclusions thereby providing the answer to the thesis question. Despite the generally acknowledged pro-competitive advantages of strategic alliances, the ways airlines cooperate raise fundamental competition concerns. Within metal-neutral

revenue-sharing joint ventures, the partner airlines try to undertake all possible means to eliminate their own incentives on the market and focus on the common interest and benefit of the alliance, namely to behave as a single entity. They no longer determine independently the policy they intend to adopt on the market; indeed, all competition parameters are affected by coordination. The whole concept of metal-neutrality 'conflicts patently with the concept inherent in the [TFEU] provisions relating to competition' since they substitute full cooperation for the risk of competition that would occur due individual airlines' different incentives.[685]

The analysis of the legal and economic context demonstrates the pro-competitive potential of these agreements and the many advantages they can provide under certain circumstances. Metal-neutral cooperation may be necessary for achieving a particular level of efficiencies, however this would be an issue for consideration in relation to indispensability under the third condition of Article 101(3) TFEU at a later stage of the assessment. Therefore, in the case of metal-neutral revenue-sharing strategic airline alliances it is reasonable to shift the burden of proof onto the parties to present their efficiency claims first, so the Commission can work on the basis of only presuming negative effect in this first phase.

This solution is especially appropriate since it was also demonstrated that the elimination of horizontal competition between alliance members leads to negative effects on prices and output. This is the effect on all hub-to-hub routes where alliance members were actual competitors before their cooperation. Furthermore, through an alliance, the existing strong position of member airlines can be further strengthened at their hub airports. This strong position at particular airports may lead to vertical foreclosure to the detriment of unallied airlines operating independently of alliances. Finally, the fact that three dominant alliance groups rule many of the most important markets may entail the risk of anticompetitive effects due to multimarket contacts. From a policy perspective, even if alliances present potential for efficiencies, under these circumstances it seems legitimate to require the parties to demonstrate those benefits first before an effect analysis is required. Therefore, the Commission can work on the basis of only presuming negative effects in this first phase.

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685 See case C-209/07 *Competition Authority v Beef Industry Development Society Ltd* [2008] ECR I-8637 para 34.

However, despite the classification as a restriction by object, efficiencies may be realised. Here again airline alliances provide a good illustration of the issue. Deeper cooperation may create benefits for both the supply-side and demand-side. Supply-side benefits include operational efficiencies like elimination of double marginalisation, economies of traffic density, scope, scale and increased output. Demand-side benefits increase consumer convenience and represent monetary value for passengers. These include new destinations, more and better spread frequencies, better connections, cooperation on frequent flyer programmes and mutual access to airport lounges. This also forms part of the alliances' economic and legal context, where their positive pro-competitive aspects can be accepted, and these could eventually outweigh the potential negative effects on certain hub-to-hub overlap routes.

As mentioned above, the wider interpretation of restrictive object has to be complemented by a realistic application of Article 101(3) TFEU. In the *Glaxo* case both the General Court and the Court of Justice represented a view that supports this argument. Consequently, undertakings are required to meet only reasonably possible requirements and show that efficiencies are sufficiently likely to be realised. Both courts have confirmed that any analysis of efficiency claims must be undertaken in the light of the legal and economic context of the sector in question.

In the case of air transportation, this requires taking into account the specificities of airline operations, for example by applying a less restrictive approach to out-of-market efficiencies. The overly restrictive paragraph 43 of the Article 101(3) guidelines on out-of-market efficiencies conflicts with this requirement and disregards the economic and legal reality of the environment airline alliances operate in. The *Glaxo* judgment of the Court of Justice also confirms that the object classification of a practice under Article 101(1) TFEU has no effect on the outcome of the efficiency analysis under Article 101(3).

The airline industry provides the example that, even in the case of object restrictions, the benefit of 101(3) TFEU should, and based on case law can, be available whenever parties to an agreement present their efficiency claims convincingly, substantiated by detailed analysis of both quantitative and qualitative efficiencies. Most importantly, the more economic approach should not mean an endless debate

between economic experts, where the party arguing efficiency claims bears the burden of demonstration to unrealistically high standards. The analysis should take note of the economic and legal reality of the industry and require a realistic analysis which acknowledges the circumstances of the case. Therefore, whenever parties to an agreement convincingly present their efficiency claims substantiated by detailed analysis of efficiencies, the benefit of Article 101(3) TFEU should be available even for restrictions of competition by object. With the appropriate interpretation of restriction by object and a realistic application of Article 101(3) TFEU, an administrable and efficient enforcement of EU competition rules can be ensured.

According to the answer to the thesis question the wider interpretation of restriction by object is correct in relation to metal-neutral revenue-sharing airline alliances and, as such, does not conflict with the more economic approach of EU competition law if complemented by a realistic application of Article 101(3) TFEU. This sector-specific example and the answer given by the analysis may be interpreted also in a more general way. The conclusions can be relevant more generally for the whole of EU competition law.

Bibliography

Books

Adkins B, *Air Transport and E.C. Competition Law* (Sweet & Maxwell 1994)

Areeda P, Turner DF and Hovenkamp H, *Antitrust Law, an analysis of antitrust principles and their application* (Aspen Law & Business 1998)

Bailey EE, Graham DR and Kaplan DP, *Deregulating the airlines* (MIT Press 1985)

Basedow J and Jung C, *Strategische Allianzen: die Vernetzung der Weltwirtschaft durch projektbezogene Kooperationen in deutschen und europäischen Wettbewerbsrecht* (Verlag C. H. Beck 1993)

Baumol WJ, Panzar JC and Willig RD, *Contestable markets and the theory of industry structure* (Harcourt Brace Jovanovich Publishers 1982)

Button K and Stough R, *Air transport networks* (Edward Elgar Publishing 2000)

Caves RE, *Air transport and its regulators*: an *industry study* (Harvard University Press 1962)

Cheng-Jui Lu A, *International airline alliances: EC competition law, US antitrust law and international air transport* (Proefschrift) (Universiteit Leiden 2002)

Child J and Faulkner D, *Strategies of cooperation: managing alliances, networks, and joint ventures* (OUP 1998)

Craig P and de Búrca G, *EU Law, text, cases and materials* (5th edn OUP 2011)

Darby M, *Alliance Brand: fulfilling the promise of partnering* (John Wiley & Sons Ltd 2006)

Doganis R, *The airline business in the twenty first century* (2nd edn Routledge 2006)

−− *Flying off course, airline economics and marketing* (4th edn Routledge 2010)

Douglas GW and Miller III JC, *Economic regulation of domestic air transport; theory and policy* (Brooking Institution 1974)

Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the economic approach* (Edward Elgar 2011)

Dussauge P and Garrette B, *Cooperative strategy: Competing successfully through strategic alliances* (John Wiley & Son Ltd 1999)

Ehlermann C-D and Laudati L (eds), *European Competition Law Annual - no. 2 European Competition Law Annual 1997 - Objectives of Competition Policy* (Hart Publishing 1997)

Faull J and Nikpay A, *The EC law of competition* (2nd edn OUP 2007)

Fiebig AR, *Strategische Allianzen und ihre Herausforderungen an das Wettbewerbsrecht der Europäischen Union* (Dissertation) (Peter Lang Verlag 1996)

Fischer R, *Time sensitivity of passengers and market structure in the airline industry, a model of international air transport* (Dissertation zur Erlangung der Würde eines Doktors der Wirtschafts- und Sozialwissenschaften) (Peter Lang Verlag 1997)

Fruhan Jr WE, *The fight for competitive advantage: a study of the United States domestic trunk carriers* (Harvard Business School 1972)

Gellhorn E, Kovacic WE and Calkins S, *Antitrust law and economics in a nutshell* (5th edn Thomson West 2004)

Goyder J and Albors-Llorens A, *Goyder's EC competition law* (5th edn OUP 2009)

Hanlon P, *Global airlines, competition in a transnational industry* (3rd edn Butterworth Heinemann 2007)

Hansen Dr. K (ed), *Strategische Allianzen – Eine neue Herausforderung für die Wettbewerbspolitik, Dokumentation der Internationalen Kartellkonferenz Berlin 1992* (Bundeskartellamt 1993)

Holloway S, *Straight and level: practical airline economics* (3rd edn Ashgate Publishing 2008)

Hovenkamp H, *Federal antitrust policy: the law of competition and its practice* (West 2005)

Iatrou K, *Airline choices for the future from alliances to mergers* (Ashgate 2007)

Jones A and Sufrin B, *EC Competition Law: Text, Cases and Materials* (4th edn OUP 2010)

Jordan WA, *Airline regulation in America; effects and imperfections* (Johns Hopkins Press 1970)

Kleymann B and Seristö H, *Managing strategic airline alliances* (Ashgate 2004)

Mockler RJ, *Multinational Strategic Alliances* (John Wiley & Sons Ltd 1999)

Morrison S and Winston C, *The economic effects of airline deregulation* (The Brookings Institution 1986)

−− *The evolution of the airline industry* (The Brooking Institution 1995)

Odudu O, *The boundries of EC compeition law – the scope of Article 81* (OUP 2006)

Oum TH, Park J-H and Zhang A, *Globalization and strategic alliances: the case of the airline industry* (Pergamon 2000)

Ortiz Blanco L, *Market power in EU antitrust law* (Hart Publishing 2012)

Rosien H-C, *Die Anwendung der Wettbewerbsregeln des EWG-Vertrages auf den Luftlinienverkehr der Europäischen Gemeinschaft* (Dissertation zur Erlangung des Doktorgrades des juristischen Fachbereichs der Georg-August-Universität zu Göttingen) (1993)

Roth PM and Vivien R, *Bellamy & Child European Community law of competition* (6th edn OUP 2008)

Schmidtchen D, Albert M and Voigt S (eds), *The more economic approach to*

European competition law (Mohr Siebeck 2007)

Suen WW, *Non-cooperation: the dark side of strategic alliances* (Palgrave McMillan 2005)

Tari E, *Stratégiai szövetségek az üzleti világban* (Közgazdasági és Jogi Könyvkiadó 1998)

Tretheway M and Oum T, *Airline Economics - Foundations for Strategy and Policy* (Centre for Transportation Studies, University of British Columbia 1992)

Van den Bergh RJ and Camesasca PD, *European Competition Law and Economics* (2nd edn Sweet & Maxwell 2006)

Vasigh B, Fleming K and Tacker T, *Introduction to air transport economics* (Ashgate Publishing 2008)

Wahyuni S, *Strategic alliance development: a study on alliances between competing firms (Dissertation)* (Rijksuniversiteit Groningen 2003)

Whish R and Bailey D, *Competition Law* (7th edn OUP 2012)

Williamson OE, *Markets and hierarchies: analysis and antitrust implications* (Free Press 1975)

–– *The economic institutions of capitalism: firms, markets, relational contracting* (Free Press 1985)

Yoshino MY and Srinivasa Rangan U, *Strategic alliances: an entrepreneurial approach to globalization* (Harvard Business School Press 1995)

Articles

Agusdinata B and de Klein W, 'The dynamics of airline alliances' (2002) 8 Journal of Air Transport Management 201

Andreangeli A, 'From Mobile Phones to Cattle: How the Court of Justice is Reframing the Approach to Article 101 (Formerly 81 EC Treaty) of the EU Treaty' (2011) 34 World Competition 215

Armantier O and Richard O, 'Evidence on pricing from the Continental Airlines and Northwest Airlines code-share agreement' (2005) Available at SSRN: <http://ssrn.com/abstract=869242> accessed 31 December 2012

−− 'Domestic airline alliances and consumer welfare' (2008) 39 RAND Journal of Economics 875

Arthur TC, 'A workable rule of reason: a less ambitious antitrust role for the federal courts' (2000-2001) 68 Antitrust Law Journal 377

Auerbach S and Delfmann W, 'Consolidating the network carrier business model in the European airline industry' in Delfmann W, Baum H, Auerbach S and Albers S (eds), *Strategic Management in the Aviation Industry* (Ashgate 2005)

Bailey D, 'Presumptions in EU competition law' (2010) 31 European Competition Law Review 362

−− 'Restrictions of competition by object under Article 101 TFEU' (2012) 49 Common Market Law Review 559

Bailey EE, 'Air transportation deregulation' (2008) available at:

<www.aeaweb.org/annual_mtg_papers/2008/2008_264.pdf> accessed 31 December 2012

Balfour J, 'Air transport – a Community success story?' (1994) 31 Common Market Law Review 1027

Bamberger GE, Carlton DW and Neumann LR, 'An empirical investigation of the

competitive effects of domestic airline alliances' (2004) 47 Journal of Law and Economics 195

Bartosch A, 'Der "More Economic Approach" in der Entscheidungspraxis der Europäischen Kommission in Beihilfesachen' (2007) 53 Recht der internationalen Wirtschaft 681

Baumol WJ and Klevorick AK, 'Input Choices and Rate-of-Return Regulation: An Overview of the Discussion' (1970) 1 The Bell Journal of Economics and Management Science 162

Beckner III CF and Salop SC, 'Decision theory and antitrust rules' (1999-2000) 67 Antitrust Law Journal 41

Bennet R, Murphy P and Schmidt J, 'International airline alliance development – necessary for network airlines and consumers'(July 2009) available at: <http://www.accc.gov.au/content/trimFile.phtml?trimFileTitle=D09+96538.pdf&trimFileFromVersionId=932218&trimFileName=D09+96538.pdf> accessed 31 December 2012

Bernheim BD and Whinston MD, 'Multimarket contact and collusive behavior' (1990) 21 The RAND Journal of Economics

Berry S, Carnall M and Spiller PT, 'Arline hubs: costs, markups and implications of customer heterogeneity' (1996) National Bureau of Economic Research Working Paper 5561

Bilotkach V, 'Price competition between international airline alliances' (2005) 39 Journal of Transport Economics and Policy 167

–– 'Price effects of airline consolidation: evidence from a sample of transatlantic markets' (2007) 33 Empirical Economics 427

–– 'Multimarket contact and intensity of competition in dynamics: evidence from an airline merger' (2009) 38 Review of Industrial Organisation 95

–– and Pai V, 'Hubs versus airport dominance' (2009), available at SSRN: <http://ssrn.com/abstract=1349381> or <http://dx.doi.org/10.2139/ssrn.1349381>

accessed 31 December 2012

−− and Hüschelrath K, ‘Antitrust immunity for airline alliances: competitive effects and recent policy actions’ (2011) 7 Journal of Competition Law & Economics 335

−− and Hüschelrath K, ‘Airline alliances, antitrust immunity and market foreclosure’ (2012) ZEW Discussion Paper No. 10083

Binggeli U and Pompeo L, ‘Analyst viewpoint, does the S-curve still exist?’ (2006) IATA Economics, available at: <http://www.iata.org/whatwedo/Documents/economics/McKinsey_SCurve.pdf> accessed 31 December 2012

Bissessur A and Alamdari F, ‘Factors affecting the operational success of strategic airline Alliances’ (1998) 25 Transportation 331

Borenstein S, ‘Hubs and high fares: dominance and market power in the US airline industry’ (1989) 20 RAND Journal of Economics 344

−− ‘The dominant-firm advantage in multiproduct industries: evidence from the US airlines’ (1991) 106 The Quarterly Journal of Economics 1237

−− ‘The evolution of US airline competition’ (1992) 6 Journal of Economic Perspective 45

−− ‘Hub dominance and pricing’ (1999) available at: <http://faculty.haas.berkeley.edu/borenste/trb99.pdf> accessed 31 December 2012.

−− ‘US domestic airline pricing, 1995-2004’ (2005) Competition Policy Center Working Papers, University of California, CPC05-48

−− and Rose NL, ‘How airline markets work...or do they? Regulatory reform in the airline industry’ in Rose NL (ed), *Economic regulation and its reform: what we have learned* (forthcoming from University of Chicago Press)

Bourgeois J and Bocken J, ‘Guidelines on the application of Article 81(3) of the EC Treaty or how to restrict a restriction’ (2005) 32 Legal Issues of Economic Integration 111

Browne WG, Toh RS and Hu MY, 'Frequent-flier programs: the Australian experience' (1995) 35 Transportation Journal 35

Brueckner JK, 'The economics of international codesharing: an analysis of airline alliances' (2001) 19 International Journal of Industrial Organization 1475

−− 'The benefits of codesharing and antitrust immunity for international passengers, with an application to the Star alliance' (2003) 9 Journal of Air Transport Management 83

−− 'International Airfares in the Age of Alliances: The Effects of Codesharing and Antitrust Immunity' (2003) 85 The Review of Economics and Statistics 105

−− Dyer NJ and Spiller PT, 'Fare determination in airline hub-and-spoke networks' (1992) 23 The RAND Journal of Economics 309

−− Lee D and Singer E, 'Airline competition and domestic US fares: a comprehensive reappraisal' (2010 revised in 2012) working paper available at: <http://www.socsci.uci.edu/~jkbrueck/price%20effects.pdf> accessed 31 December 2012

−− Lee D and Singer E, 'Alliance, codesharing, antitrust immunity and international airfares: do previous patterns persist?' (2011) 7 Journal of Competition Law & Economics 573

−− and Proost S, 'Carve-out under airline antitrust immunity' (2010) 28 International Journal of Industrial Organization 657

−− and Spiller PT, 'Competitions and mergers in airline networks' (1991) 9 International Journal of Industrial Organization 323

−− and Spiller PT, 'Economies of traffic density in the deregulated airline industry' (1994) 37 Journal of Law and Economics 379

−− and Whalen WT, 'The Price Effects of International Airline Alliances' (1998) Working Paper WP67, Institute of Government and Public Affairs University of Illinois

−− and Whalen WT, ‘The Price Effects of International Airline Alliances’ (2000) 43 Journal of Law and Economics 503

−− and Zhang Y, ‘A model of scheduling in airline networks – How a hub-and-spoke system affects flight frequency, fares and welfare’ (2001) 35 Journal of Transport Economics and Policy 195

Burghouw G, Hakfoort J, and Ritsema van Eck J, ‘The spatial configuration of airline networks in Europe’ (2003) 9 Journal of Air Transport Management 309

Burton J, Hanlon P, ‘Airline alliances: cooperating to compete?’ (1994) 1 Journal of Air Transport Management 209

Calkins S, ‘Calfornia Dental Association: not a quick look but not the full monty’ (1999-2000) 67 Antitrust Law Journal 495

Caves D, Christensen LR and Tretheway MW, ‘Economies of Density versus Economies of Scale: Why Trunk and Local Service Airline Costs Differ’ (1984) 15 RAND Journal of Economics 471

Cerulli Irelli V, ‘Article 81(1) EC: some remarks on the notion of restriction of competition’ (2009) 20 European Business Law Review 287

Chen Y and Gayle PG, ‘Vertical contracting between airlines: an equilibrium analysis of codeshare alliances’ (2007) 25 International Journal of Industrial Organization 1046

Christiansen A and Kerber W, ‘Competition policy with optimally differentiated rules instead of “per se v rules of reason”’ (2006) 2 Journal of Competition Law & Economics 215

Coase RH, ‘The nature of the firm’ (1937) 4 Economica 386

Contractor FJ and Lorange P, ‘Why should firms cooperate? The strategy and economics basis for cooperative ventures’ in FJ Contractor and P Lorange (eds), *Cooperative strategies in international business* (Lexington Books 1988)

Crocioni P, ‘Defining airline markets: a comparison of the U.S. and EU experience’

(2000) 45 Antitrust Bulletin 1

Dennis N, 'End of the free lunch? The responses of traditional European airlines to the low-cost carrier threat' (2007) 13 Journal of Air Transport Management 311

Dennis NPS, 'The development of long-haul air services from regional and secondary airports in Europe' (paper submitted to the 45th Congress of the European Regional Science Association, Amsterdam, 23-27 August 2005)

De Vany AS, 'The effect of price and entry regulation on airline output, capacity and efficiency' (1975) 6 Bell Journal of Economics 327

Douglas GW and Miller III JC, 'Quality Competition, Industry Equilibrium and Efficiency in the Price-Constrained Airline Market' (1974) 64 American Economic Review 657

Eads G, 'Competition in the domestic trunk airline industry: too much or too little?' in Phillips A (ed), *Promoting competition in regulated markets* (The Brookings Institution 1975)

Easterbrook FH, 'The limits of Antitrust' (1984) 63 Texas Law Review 1

−− 'Ignorance and antitrust' in Jorde TM and Teece DJ (eds), *Antitrust, Innovation, and Competitiveness* (OUP 1992) 119

Evans N, 'Collaborative strategy: an analysis of the changing world of international airline alliances' (2001) 22 Tourism Management 229

Evans WN and Kessides IN, 'Living by the "golden rule": multimarket contact in the US airline industry' (1994) 109 The Quarterly Journal of Economics 341

Evans DS and Padilla AJ, 'Excessive prices: using economics to define administrable legal rules' (2005) 1 Journal of Competition Law and Economics 97

Fageda X, 'Does airline competition work in short-haul markets?' (2005) available at: <http://128.118.178.162/eps/io/papers/0511/0511010.pdf> accessed 31 December 2012

Forsyth P, King J and Rodolfo CL, 'Open Skies in ASEAN' (2006) 12 Journal of

Air Transport Management 143

Fournier GM and Zuehlke T, 'Airline price wars with multi-market carrier contacts and low-cost carrier entrants' (2003) paper prepared for the International Industrial Organization Conference, Boston, Massachusetts, April 5-6, 2003 available at: <http://mailer.fsu.edu/~tzuehlke/papers/farewars.pdf> accessed 31 December 2012

Francis G, Humphreys I, Ison S and Aicken M, 'Where next for low cost airlines? A spatial and temporal comparative study' (2006) 14 Journal of Transport Geography 83

−− Dennis N, Ison S and Humphreys I, 'The transferability of the low-cost model to long-haul operations' (2007) 28 Tourism Management 391

Franke M, 'Competition between network carriers and low-cost carriers – retreat battle or breakthrough to a new level of efficiency?' (2004) 10 Journal of Air Transport Management 15

Garrette B and Dussauge P, 'Pattern of strategic alliances between rival firms' (1995) 4 Group Decision and Negotiation 429

−− and Dussauge P, 'Anticipating the evolutions and outcomes of strategic alliances between rival firms' (1995) 27 International Studies of Management & Organization 104

Gerbrandy A, 'Case C-8/08, T-Mobile Netherlands BV, KPN Mobile NV, Orange Nederland NV, Vodafone Libertel NV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit, Judgment of the Court of Justice (Third Chamber) of 4 June 2009' (2010) 47 Common Market Law Review 1199

Gillen D and Morrison WG, 'Regulation, competition and network evolution in aviation' (2005) 11 Journal of Air Transport Management 161

Gillespie W and Richard O, 'Antitrust immunity and international airline alliances' (2011) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 11-1

Gippini-Fournier E, 'The elusive standard of proof in EU competition cases' in

Ehlermann C-D and Marquis M (eds), *European Competition Law Annual 2009* (Hart Publishing 2011)

Goel A, 'Strategic alliances in the global airline industry' (2003) available at: <http://www.iimahd.ernet.in/publications/data/2003-01-02AbhishekGoel.pdf> accessed 31 December 2012

Goetz AR, 'Deregulation, competition, and antitrust implications in the US airline industry' (2002) 10 Journal of Transport Geography 1

Goolsbee A and Syverson C, 'How do incumbents respond to the threat of entry? Evidence from major airlines' (2005) National Bureau of Economic Research Working Paper 11072

Gremminger M, 'The Commission's approach towards global airline alliances — some evolving assessment principles' (2003) 1 EC Competition Policy Newsletter 75

Hansson T, Dr. Ringbeck J and Dr. Franke M, 'Airlines: a new operating model - providing services and coverage without the cost penalty' (2002) at: <http://www.boozallen.com/media/file/Airlines_NOM_Final.pdf> accessed 31 December 2012

Hellström P, 'A Uniform standard of proof in EU competition proceedings' in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual 2009* (Hart Publishing 2011)

Hendricks K, Piccione M and Tan G, 'The economics of hubs: the case of monopoly' (1995) 62 Review of Economic Studies 83

−− Piccione M and Tan G, 'Entry and exit in hub-and-spoke networks' (1997) 28 The RAND Journal of Economics 291

Heyer K, 'A world of uncertainty: economics and globalization of antitrust' (2004-2005) 72 Antitrust Law Journal 375

Hollmann HH, 'Strategische Allianzen: Unternehmens- und wettbewerbspolitische Aspekte' (1992) 42 Wirtschaft und Wettbewerb 293

Humphreys B and Morrell P, 'The potential impact of the EU/US Open Sky agreement: what will happen at Heathrow after spring 2008' (2009) 15 Journal of Air Transport Management 72

Hurdle GJ, Johnson RL, Joskow AS, Werden GJ and Williams MA, 'Concentration, potential entry and performance in the airline industry' (1989) 38 The Journal of Industrial Economics 119

Hymer SH, 'The internationalization of capital' (1972) 6 The Journal of Economic Issues 91

Ito H and Lee D, 'Domestic codesharing practices in the US airline industry' (2005) 11 Journal of Air Transport Management 89

–– and Lee D, 'Domestic codesharing, alliances and airfares in the US airline industry' (2007) 50 The Journal of Law and Economics 355

Jaeger T, 'Systemfragen des More Economic Approach im Beihilferecht' (2008) 58 Wirtschaft und Wettbewerb 1064

Jones A, 'Analysis of agreements under U.S. and EC antitrust law – Convergence or divergence?' (2006) 51 The Antitrust Bulletin 691

–– 'The journey towards an effects-based approach under Article 101 TFEU – the case of hardcore restraints' (2010) 55 The Antitrust Bulletin 783

–– 'Left behind by modernisation? Restrictions by object under Article 101(1)' (2010) 6 European Competition Journal 649

Joskow PL, 'Transaction cost economics, antitrust rules, and remedies' (2002) 18(1) Journal of Law, Economics and Organization 95

Kamita R, 'Analyzing the Impact of Antitrust Immunity: Price Effects Following the Aloha-Hawaiian Antitrust Immunity Agreement' (2005) US DOJ Antitrust Division Economic Analysis Group Discussion Paper EAG 05-9

–– 'Analyzing the Effects of Temporary Antitrust Immunity: The Aloha-Hawaiian Immunity Agreement' (2010) 53 Journal of Law and Economics 239

Kasper DM and Lee DN in Reply of the Joint Applicants, (2005) DOT's Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines antitrust immunity application case, *SkyTeam I* (DOT-OST-2004-19214-0114-0009)

Keeler TE, 'Airline Regulation and Market Performance' (1972) 3 The Bell Journal of Economics and Management Science 399

Kim EH and Singal V, 'Mergers and market power: evidence from the airline industry' (1993) 83 The American Economic Review 549

King S, 'The object box: law, policy or myth?' (2011) 7 European Competition Journal 269

Kjølbye L, 'The new Commission guidelines on the application of Article 81(3): an economic approach to Article 81' (2004) 25 European Competition Law Review 566

−− 'Escaping effects analysis: the Commission's new approach to restrictions by object' (2011) CPI Antitrust Journal 2

Klingenberg C, 'The future of continental traffic program: how Lufthansa is countering competition from no-frills airlines' in Delfmann W, Baum H, Auerbach S and Albers S (eds), *Strategic Management in the Aviation Industry* (Ashgate 2005)

Kolasky WJ, 'Antitrust enforcement guidelines for strategic alliances' in Corporate Law and Practice Course Handbook Series (1998) July-August, Structuring, Negotiating & Implementing Strategic Alliances 499

Kolstad O, 'Object contra effect in Swedish and European competition law' (2009) Uppdragsforskningsrapport 2009:3 available at: <www.kkv.se/upload/Filer/Trycksaker/Rapporter/uppdragsforskning/forsk_rap_2009-3_object_contra_effect.pdf> accessed 31 December 2012

Kwoka K and Shumilkina E, 'The price effect of eliminating potential competition: evidence from an airline merger' (2010) 58 The Journal of Industrial Economics 767

Lederman M, 'Are frequent flyer programs a cause of the "hub premium"?' (2008) 17 Journal of Economics & Management Strategy 35

Lee D and Luengo-Prado MJ, 'The impact of passenger mix on reported "hub premiums" in the US airline industry' (2005) 72 Southern Economic Journal 372

Levine ME, 'Airline competition in deregulated markets: theory, firm strategy and public policy' (1987) 4 Yale Journal on Regulation 393

−− 'Airline alliances and systems competition: antitrust policy toward airlines and the Department of Justice guidelines' (2008) 45 Houston Law Review 333

Lijesen MG, Rietveld P and Nijkamp P, 'Hub premiums in European civil aviation' (2001) 8 Transport Policy 193

Loozen E, 'The application of a more economic approach to restrictions by object: No revolution after all (T-Mobile Netherlands (C-8/08))' (2010) 31 European Competition Law Review 146

Love R, Goth J, Budde F, Schilling D and Woffenden B, 'Understanding the demand for air travel: how to compete more effectively – meeting the new challenges of the airline industry' (Boston Consulting Group 2006)

Lowe P, 'Taking sound decisions on the basis of available evidence' in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual 2009* (Hart Publishing 2011)

Lugard P and Hancher L, 'Honey, I shrunk the Article! A critical assessment of the Commission's notice on Article 81(3) of the EC Treaty' (2004) 25 European Competition Law Review 410

Macario R, Reis V, Viegas J, Meersman H, Monteiro F, Van de Voorde E, Vanelslander T, Mackenzie-Williams P and Schmidt H, 'The consequences of the growing European low-cost airline sector' a study prepared for the European Parliament's Committee on transport and Tourism (4 December 2007) available at: <http://bookshop.europa.eu/en/the-consequences-of-the-growing-european-low-cost-airline-sector-pbBA3008255/> accessed 31 December 2012

Mahtani MR, 'Thinking outside the object box: an EU and UK perspective' (2012) 8 European Competition Journal 1

Marquis M, ‘O2 (Germany) v Commission and the exotic mysteries of Article 81(1) EC’ (2007) 32(1) European Law Review 29

McChesney FS, ‘Easterbrook on errors’ (2010) 6(1) Journal of Competition Law & Economics 11

Milde M, ‘International Air Law and ICAO’ in M Benkő (ed), *Essential Air and Space Law* (Eleven International Publishing 2008)

Montag F, ‘Legal questions arising from code-sharing‘ (1995) European Air Law Association papers

Morell P, ‘Can long-haul low-cost airlines be successful?’ (2008) 24 Research in Transportation Economics 61

Morrish SC and Hamilton RT, ‘Airline alliances — who benefits?’ (2002) 8 Journal of Air Transport Management 402

Morrison S and Winston C, ‘Enhancing the performance of the deregulated air transportation system’ (1989) Brookings Papers on Economic Activity. Microeconomics 61

Morrison SA, ‘Actual, adjacent, and potential competition, estimating the full effect of Southwest Airlines’ (2001) 35 Journal of Transport Economics and Policy 239

Nako SM, ‘Frequent flyer programs and business travellers: an empirical investigation’ (1992) 28 Logistics and Transportation Review 395

Nazzini R, ‘Article 81 EC between time present and time past: a normative critique of “restriction of competition” in EU law’ (2006) 43 Common Market Law Review 497

Nijkamp P, ‘Liberalisation of Air Transport in Europe: The Survival of the Fittest?’ Research memorandum 1996-1 (1996) available at: <ftp://zappa.ubvu.vu.nl/19960011.pdf> accessed 31 December 2012

Odudu O, ‘Interpreting Article 81(1): object as subjective intention’ (2001) 26 European Law Review 60

−− ‘Interpreting Article 81(1): demonstrating restrictive effect’ (2001) 26 European Law Review 261

−− ‘Interpreting Article 81(1): the object requirement revisited’ (2001) 26 European Law Review 379

−− ‘Restriction of competition by object – What’s the beef?’ (2009) 8(1) Competition Law Journal 11

Ortiz Blanco L, ‘Standards of Proof and Personal Conviction in EU Antitrust and Merger Control Procedures’ in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual 2009* (Hart Publishing 2011)

Oum TH, Zhang A and Zhang Y, ‘Airline network rivalry’ (1995) 28 Canadian Journal of Economics 836

Park J-H and Zhang A, ‘An empirical analysis of global airline alliances: cases in North Atlantic markets’ (2000) 16 Review of Industrial Organisation 367

−− Zhang A and Zhang Y, ‘Analytical models of international alliances in the airline industry’ (2001) 35 Transportation Research Part B 865

Peeperkorn L, ‘Revised EU competition rules for supply and distribution agreements’ available at: <http://ec.europa.eu/competition/speeches/text/sp2011_10_en.pdf> accessed 31 December 2012

Pheasant J and Rab S, ‘Assessing efficiencies under Article 81(3) – Is the bar getting higher?’ (2009) Hogan & Hartson Antitrust Alert 9

Piraino Jr TA, ‘Making sense of the rule of reason: a new standard for Section 1 of the Sherman Act’ (1994) 47 Vanderbilt Law Review 1753

Posner RA, ‘Theories of Economic Regulation’ (1974) 5 The Bell Journal of Economics and Management Science 335

Proussalogou K and Koppelman FS, ‘The choice of air carrier, flight, and fare class’ (1999) 5 Journal of Transport Management 193

Reindl AP, 'Resale Price Maintenance and Article 101: developing a more sensible analytical approach' (2011) 33 Fordham International Law Journal 1300

Reitzes JD and Moss D, 'Airline alliances and systems competition' (2008) 45 Houston Law Review 293

Reynolds Feighan A, 'Traffic distribution in low-cost and full-service network carriers in the US air transport markets' (2001) 7 Journal of Air Transport Management 265

Rhoades DL and Lush H, 'A typology of strategic alliances in the airline industry: Propositions for stability and duration' (1997) 3 Journal of Air transport Management 109

Robertson B, 'What is a Restriction of Competition? The Implications of the CFI's Judgment in O2 Germany and the Rule of Reason' (2007) 28 European Competition Law Review 252

Rynerson SD, 'Everybody wants to go to heaven, but nobody wants to die: the story of the transatlantic common aviation area' (2002) Summer/Fall Denver Journal of International Law and Policy 424

Shibata K, 'Motives for mega-alliance between US ex-trunk carriers and European flag carriers' (2001) 7 Journal of Air Transport Management 197

Singal V, 'Airline mergers and multimarket contact' (1996) 17 Managerial and Decision Economics 559

Soames T and Goeteyn G, 'Airline mergers and alliances: EU regulatory issues' (2001) 16(1) Air and Space Lawyer 13

Stehmann O, 'Commission approves British Midland International joining STAR alliance' (2001) 3 EC Competition Policy Newsletter 45

Stigler GJ, 'The Theory of Economic Regulation' (1971) 2 The Bell Journal of Economics and Management Science 3

Swan W, 'Misunderstandings about airline growth' (2007) 13 Journal of Air

Transport Management 3

Tom WK and Pak C, 'Towards a flexible rule of reason' (2000-2001) 68 Antitrust Law Journal 391

Tomboy C, 'The proposed British Airways-American Airlines alliance' (2002) 2 EC Competition Policy Newsletter 38

–– 'Commission approves partnership between British Airways and SN Brussels Airlines' (2003) 2 EC Competition Policy Newsletter 64

Tretheway MW, 'Globalization of the Airline Industry and Implications for Canada' (1990) 26 December Logistics and Transportation Review 4

–– and Kincaid IS, 'The effect of market structure on airline prices: a review of empirical results' (2005) 70 Journal of Air Law and Commerce 467

Völcker SB, 'Case law: Joined cases C-501, 513, 515 & 519/06 P, GlaxoSmithKline Services Unlimited v Commission, Judgment of the Court of Justice (Third Chamber) of 6 October 2009, [ECR] I-9291' (2011) 48 Common Market Law Review 175

Wan X, Zou L and Dresner M, 'Assessing the price effects of airline alliances on parallel routes' (2009) 45 Transportation Research Part E 627

Wei W and Hansen M, 'Impact of aircraft size and seat availability on airlines' demand and market share in duopoly markets' (2005) 41 Transportation Research Part E 315

Wensveen JG and Leick R, 'The long-haul low-cost carrier: a unique business model' (2009) 15 Journal of Air Transport Management 127

Werden GJ, Joskow AS and Johnson RL, 'The effects of mergers on price and output: two case studies from the airline industry' (1991) 12 Managerial and Decision Economics 341

Whalen WT, 'Constrained contracting and quasi-mergers: price effects of code sharing and antitrust immunity in international alliances' (2003) US DOJ Antitrust

Division Economic Analysis Group Discussion Paper EAG 03-6

−− 'A panel data analysis of code-sharing, antitrust immunity, and open skies treaties in international aviation markets' (2007) 30 Review of Industrial Organisation 39

Whish R and Sufrin B, 'Article 85 an the Rule of Reason' (1987) 7 Yearbook of European Law 12

Woll C, 'The road to external representation: the European Commission's activism in international air transport' (2006) 13 Journal of European Public Policy 52

Youssef W and Hansen M, 'Consequences of strategic alliances between international airlines: the case of Swissair and SAS' (1994) 28 Transportation Research Part A 415

Zhang A, 'An analysis of fortress hubs in airline networks' (1996) 30 Journal of Transport Economics and Policy 293

Studies, reports, comments and other materials

US General Accounting Office: International aviation: airline alliances produce benefits, but effect on competition is uncertain (1995)

Strategic alliances under the 'Competition Act' – Director of Investigation and Research, November 1995 available at: <www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/01671.html> accessed 31 December 2012

1999 OECD Roundtable on Airline Mergers and Alliances DAFFE/CLP(2000)1

Transportation Research Board Special Report 255 - Entry and competition in the U.S. airline industry: issues and opportunities (1999), Chapter 4 'Effects of airline alliances and partnerships on competition' available at: <http://onlinepubs.trb.org/onlinepubs/sr/sr255/chap4.pdf> accessed 31 December 2012

US Department of Transportation, Office of Secretary: International aviation developments: global deregulation takes off (1999)

US Department of Transportation: International aviation developments: transatlantic deregulation, the alliance network effect (2000)

The role of market definition in monopoly and dominance inquires, Economic Discussion Paper 2 - A report for the Office of Fair Trading by National Economic Research Associates, (July 2001)

Competitive Airlines - Towards a more vigorous competition policy in relation to the air travel market; Report from the Nordic competition authorities No. 1/2002

Mergers and alliances in civil aviation – an overview of the current enforcement practices of the ECA concerning market definition, competition assessment and remedies (Report of the ECA Air Traffic Working Group 2004)

Cools K and Roos A, 'The role of alliances in corporate strategy' (The Boston Consulting Group 2005)

Remetei-Filep Á, 'Strategic airline alliances: a competition policy analysis with main emphasis on EC competition law' (LL.M. thesis, Erasmus Universiteit Rotterdam 2005)

Competition impact of code-share agreements, final report (January 2007) prepared by Steer Davies Gleave

The economic impacts of an open aviation area between the EU and the US – prepared by Booz Allen Hamliton for DG TREN (January 2007)

Deutsches Zentrum für Luft- und Raumfahrt e.V., 'Airline Business Models' (December 2008)

Transatlantic airline alliances: competitive issues and regulatory approaches, a report by the European Commission and the United States Department of Transportation (16 November 2010)

Annual analysis of the EU air transport market 2010, final report (European

Commission September 2011)

Contribution from the European Union (DAF/COMP/GF/WD(2011)20)

Comments of the Department of Justice in American/British Airways I (Docket OST-1997-2058) (21 May 1998)

Comments of the Department of Justice American/British Airways II (Docket OST-2001-10387 and 11029) (17 December 2001)

Reitzes JD, Robyn D and Neels K in Public answer of American Airlines Inc, (2005) submission in DOT's Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines antitrust immunity application case, SkyTeam I (Docket OST-2004-19214-0097)

Comments of the Department of Justice in United/Brussels Airlines/Lufthansa/Air Canada/SAS/Austrian/bmi/ LOT/Swiss/TAP (Docket OST 2008-0234) (26 June 2009)

Comments of the Department of Justice in American/British Airways/Iberia/Finnair/ Royal Jordanian (Docket OST-2008-0252) (21 December 2009)

FTC, DOJ 'Antitrust Guidelines for Collaborations among Competitors'

IATA Worldwide Slot Guidelines

Presentations

Franke M, 'Value Creation in Small and Mid-size Airlines: How small and medium network airlines can prepare for a changed industrial framework' (CEE Aviation 2006 conference, Budapest, 19 June 2006)

Gerard D, 'The effects-based approach under Article 101 TFEU and its paradoxes: modernisation at war with itself?' (Ten years of the effects-based approach in EU competition law, Brussels, 27-28 October 2011)

Kreiken B, ‘Alliances & managing customer value’ (Erasmus University Rotterdam, 19 February 2004)

Lee D, ‘US industry outlook: presentation to Embraer’ (29 May 2007)

Levine ME, ‘Airline consolidation: how will it reshape the industry? What does it mean for Europe? (First Annual Airneth Lecture, Schipol, 11 March 2009)

Swan W, ‘Airline network evolution and the role of aircraft technology’ (Annual Lecture of Airneth, Schipol, 15 January 2010)

Whish R, ‘Recent Developments in EU and UK Competition Law’ (presentation at King’s College London, 8 October 2009)

–– ‘Agreements that restrict competition by object: recent case-law’ (presentation at Pázmány Péter Catholic University, Budapest, 23 March 2010)

–– ‘How efficient are the EU competition rules at analysing efficiencies?’ (lecture at DG Competition, Brussels, 26 November 2012)

Zenger H, ‘Theories of harm: Conception, reliability and selection’ (Ten years of the effects-based approach in EU competition law, Brussels, 27-28 October 2011)

Annual Reports of the European Commission

XXIVth Report on Competition Policy (1994) (European Commission 1995)

XXVth Report on Competition Policy (1995) (European Commission 1996)

XXVIth Report on Competition Policy (1996) (European Commission 1997)

XXVIIth Report on Competition Policy (1997) (European Commission 1998)

XXVIIIth Report on Competition Policy (1998) (European Commission 1999)

XXXIIIrd Report on Competition Policy (2003) (European Commission 2004)

Commission notices, guidelines, communications and proposals

The Commission's 'first memorandum' on liberalisation: Contribution of the European Communities to the development of Air Transport Services COM 311 Bulletin of the European Community, Supplement 5/79

Proposal for a Council Regulation (EEC) applying Articles 85 and 86 of the Treaty to air transport, COM (81) final, August 10 1981 [1981] OJ C291/4, as amended by [1982] C317/3

Progress towards the development of a Community air transport policy. Civil aviation memorandum No. 2. Communication and proposals by the Commission to the Council, COM (84) 72 final

Proposal for a Council Decision on a consultation and authorization procedure for agreements concerning commercial aviation relations between Member States and third countries COM (90) 17 final

Air transport relations with third countries. Communication from the Commission to the Council COM (92) 434 final

1996 Commission Notice on the non-imposition or reduction of fines in cartel cases [1996] OJ C2074

Commission notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C372/5

White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty [1999] OJ C132/1

Commission notice - Guidelines on Vertical Restraints [2000] OJ C291/1

Commission notice, guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements [2001] OJ C3/2

Commission notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community [2001] OJ C368/07

Green Paper on the Review of Council Regulation (EEC) 4064/89 COM (2001) 745 final

2002 Commission notice on immunity from fines and reduction of fines in cartel cases [2002] OJ C45/3

Communication from the Commission on the consequences of the Court judgements of 5 November 2002 for European air transport policy COM (2002) 649 final

COM (2003) 94 final, Proposal for a European Parliament and Council Regulation on the negotiation and im-plementation of air service agreements between Member States and third countries 2003/0044 (COD)

Communication from the Commission, notice, guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/08

Commission Notice — Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty [2004] OJ C101/81

Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5

Communication from the Commission: A Community aviation policy towards its neighbours COM (2004) 74 final

Communication from the Commission: A Framework for Developing Relations with the Russian Federation in the Field of Air Transport COM (2005) 77 final

Communication from the Commission: A Community civil aviation policy towards the People's Republic of China – strengthening co-operation and opening markets COM (2005) 78 final

Communication from the Commission: Developing the agenda for the Community's external aviation policy COM (2005) 79 final

Communication from the Commission: Strengthening aviation relations with Chile COM (2005) 406 final

Communication from the Commission: Developing a Community civil aviation policy towards New Zealand COM (2005) 407 final

Communication from the Commission: Developing a Community civil aviation policy towards Australia COM (2005) 408 final

Communication from the Commission: Developing a Community civil aviation policy towards the Republic of India COM (2005) 409 final

Commission Discussion Paper on exclusionary abuses by dominant firms (December 2005)

2006 Commission notice on immunity from fines and reduction of fines in cartel cases [2006] OJ C298/17

Commission consolidated jurisdictional notice under Council Regulation (EC) 139/2004 on the control of concentrations between undertakings [2008] OJ C95/1

Commission Notice on the conduct of settlement procedures in view of the adoption of Decisions pursuant to Article 7 and Article 23 of Council Regulation (EC) 1/2003 in cartel cases [2008] OJ C167/1

Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6

Communication from the Commission - Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C45/7

Communication from the Commission - Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1

Commission notice - Guidelines on Vertical Restraints [2010] OJ C130/1

Supplementary guidelines on vertical restraints in agreements for the sale and repair of motor vehicles and for the distribution of spare parts for motor vehicles [2010] OJ C138/16

Communication from the Commission, guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] OJ C11/1

Proposal for a Regulation of the European Parliament and of the Council on common rules for the allocation of slots at European Union airports COM (2011) 827 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - The EU's External Aviation Policy - Addressing Future Challenges COM (2012) 556 final

Speeches

Italianer A, '"Quantity" and "quality" in economic assessment' (Charles River Associates Annual Conference, Brussels, 7 December 2011)

Kinnock N (Association of European Airlines – Luxembourg, 28 April 1995), SPEECH/95/82

Klein JI, Assistant Attorney General, Antitrust Division before the Committee on Commerce, Science, and Transportation, U.S. Senate concerning antitrust issues in the airline industry (July 27, 2000)

McDonald JB, 'Antitrust for airlines' (Regional Airline Association President's Council Meeting, 3 November 2005)

Monti M, 'EU competition policy' (Fordham Annual Conference on International Antitrust Law & Policy, New York, 31 October 2002)

−− ‘A reformed competition policy: achievements and challenges for the future’ (Center of European Reform Conference, Brussels, 28 October 2004)

O’Connel JJ, ‘Impact of consolidation on the aviation industry, with a focus on the proposed merger between Delta Air Lines and Northwest Airlines’ (Subcommittee on Aviation, Committee on Transportation and Infrastructure, U.S. House of Representatives, Washington D.C., 14 May 2008)

Press releases, news articles, newsletters

Council conclusions of 15 March 1993 Press release 5333/93

Commission explains the background to its position on air transport policy with the United States – MEMO/95/24, 02/03/1995

1937th meeting of the Council press release 8079/96, 17/06/1996

IP/02/1569 (29/10/2002) Commission closes probe into *KLM/NorthWest and Lufthansa/SAS/United Airlines* transatlantic air alliances

Michaels D and Lunsford JL, ‘Airlines Move Toward Buying Their Planes Jointly in Alliances’ Wall Street Journal A3 (20 May 2003)

2515th meeting of the Council 9686/03 (Presse 146), 03/06/2003

IP/06/1773 (12/12/2006) European Commission to open aviation negotiations with Ukraine

2772nd meeting of the Council 15900/06 (Presse 343), 11-12/12/2006

2791st meeting of the Council 7272/07 (Presse 51), 22/03/2007

2877th meeting of the Council 10410/08 (Presse 165), 12-12/06/2008

Jetstar press release of 6 January 2010: Jetstar and AirAsia form world first alliance

IP/11/327 (18/03/2011) Breakthrough in EU-Brazil negotiations on far-reaching aviation agreement

British Airways' planned cooperation with JAL. Press release of February 8, 2012 IAG 01/2012

IP/12/307 (22/03/2012) EU-Israel aviation agreement: Israel joins Europe in aviation

Airline Business (May 2012)

IP/12/688 (26/06/2012) Transport: Republic of Moldova to gradually integrate into the European common aviation market

'Short selling' in Airline Weekly issue no. 385 (4 June 2012)

Airline Business (September 2012)

Airline Weekly issue no. 399 (24 September 2012)

'The Backend' Airline Weekly issue no. 407 (19 November 2012)

Web materials

Gerard D, 'Effect-based enforcement of Article 101 TFEU: the "object paradox" (Kluwer Competition Law Blog, 17 February 2012): <http://kluwercompetitionlawblog.com/2012/02/17/effects-based-enforcement-of-article-101-tfeu-the-%E2%80%9Cobject-paradox%E2%80%9D/> accessed 31 December 2012

An introduction to oneworld: The alliance that revolves around you (oneworld media information) available at: <http://www.oneworld.com/content/factsheet/2012-05-01%20Introduction%20to%20oneworld.pdf> accessed 31 December 2012

Star Alliance – Strategic alliances in aviation (April 2009) – PowerPoint presentations of the Star Alliance, available at:

<http://www.staralliance.com/assets/doc/en/press/media-library/pdf/General_Presentation _APR09.pdf > accessed 31 December 2012

IATA Economic Briefing, Airline fuel and labour cost share (February 2010), available at:

<www.iata.org/whatwedo/Documents/economics/Airline_Labour_Cost_Share_Feb2010.pdf> accessed 31 December 2012

IATA jet fuel price development, available at:
<http://www.iata.org/publications/economics/fuel-monitor/Pages/index.aspx> accessed 31 December 2012

Table of cases

Union Courts

Court of Justice of the European Union

Bekämpfung Unlauteren Wettbewerbs eV [1989] ECR 803

C-234/89 Stergios Delimitis v Henninger Bräu AG [1991] ECR I-0935

C-235/92 P Montecatini v Commission [1999] ECR I-4539

C-360/92 P Publishers Association v Commission [1995] ECR I-23

C-219/95 P Ferriere Nord SpA v Commission [1997] ECR I-4411

C-307/97 Saint-Gobain v Finanzamt Aachen-Innenstadt ECR [1999] I-6161

C-466/98 Commission v United Kingdom of Great Britain and Northern Ireland [2002] ECR I-9427

C-467/98 Commission v Kingdom of Denmark [2002] ECR I-9519

C-468/98 Commission v Kingdom of Sweden [2002] ECR I-9575

C-469/98 Commission v Republic of Finland [2002] ECR I-9627

C-471/98 Commission v Kingdom of Belgium [2002] ECR I-9681

C-472/98 Commission v Grand Duchy of Luxembourg [2002] ECR I-9741

C-475/98 Commission v Republic of Austria [2002] ECR I-9797

C-476/98 Commission v Republic of Germany [2002] ECR I-9855

C-55/00 Gottardo v INPS [ECR] I-413

C-551/03 P General Motors v Commission [2006] ECR I-3173

C-523/04 Commission v Kingdom of the Netherlands [2007] ECR I-3267

C-238/05 Asnef-Equifax, SISC, SL v Ausbanc [2006] ECR I-11125

C-501/06 P GlaxoSmithKline Services Unlimited v Commission [2009] ECR I-9291

C-209/07 Competition Authority v Beef Industry Development Society Ltd [2008] ECR I-8637

C-260/07 Pedro IV Servicios SL v Total España SA [2009] ECR I-2437

C-8/08 T-Mobile Netherlands [2009] ECR I-4529

C-403/08 and C-429/08 Football Association Premier League and Others v QC Leisure and Others Karen Murphy v Media Protection Services Ltd [2011] ECR not yet reported

C-439/09 Pierre Fabre Dermo-Cosmétique SAS v Président de l'Autorité de la concurrence and Ministre de l'Économie, de l'Industrie et de l'Emploi [2011] ECR not yet reported

C-209/10 Post Danmark [2012] ECR not yet reported

C-226/11 Expedia Inc [2012] ECR not yet reported

General Court

T-2/93 Air France v Commission [1994] ECR II-323

T-17/93 Matra Hachette v Commission [1994] ECR II-595

T-374/94, T-375/94, T-384/94 and T-388/94 European Night Services Ltd and others v Commission [1998] ECR II-3141

T-86/95 Compagnie Générale Maritime and other v Commission [2002] ECR II-1011

T-65/98 Van den Bergh Foods v Commission [2002] ECR II-4653

T-112/99 M6 and Others v Commission [2001] ECR II-2459

T-131/99 Michael Hamilton Shaw and Timothy John Falla v Commission [2002] ECR II-2023

T-185/00, T-216/00, T-299/00 and T-300/00 Métropole Télévision SA (M6) and

others v Commission [2002] ECR II-03805

T-213/00 CMA CGM and others v Commission [2003] ECR II-913

T-168/01 GlaxoSmithKline Services v Commission [2006] ECR II-2969

T-209/01 Honeywell International Inc v Commission [2005] ECR II-5527

T-210/01 General Electric Company v Commission [2005] ECR II-5575

T-310/01 Schneider Electric SA v Commission [2002] ECR II-4071

T-5/02 Tetra Laval BV v Commission [2002] ECR II-4381

T-328/03 O2 (Germany) GmbH & Co OHG v Commission [2006] ECR II-01231

T-177/04 easyJet v Commission [2006] ECR II-1913

T-446/05 Amann & Söhne and Cousin Filterie v Commission [2010] ECR II-01255

T-342/07 Ryanair Holdings plc v Commission ECR II-3457

T-461/07 Visa Europe and Visa International Service v Commission [2011] ECR not yet reported

T-111/08 Mastercard and others v Commission [2012] ECR not yet reported

T-199/08 Ziegler SA v Commission [2011] ECR not yet reported

T-360/09 E.ON Ruhrgas AG and E.ON AG v Commission [2012] ECR not yet reported

Opinion of Advocate Generals

AG Tizzano's opinion in case C-551/03 P General Motors v Commission [2006] ECR I-3173

AG Trstenjak's opinion in case C-501/06 P GlaxoSmithKline Services Unlimited v

Commission [2009] ECR I-9291

AG Trstenjak's opinion in case C-209/07 Competition Authority v Beef Industry Development Society Ltd [2008] ECR I-8637

AG Kokott's opinion in case C-8/08 T-Mobile Netherlands [2009] ECR I-4529

AG Mazák's opinion in case C-439/09 Pierre Fabre Dermo-Cosmétique SAS v Président de l'Autorité de la concurrence and Ministre de l'Économie, de l'Industrie et de l'Emploi [2011] ECR not yet reported

AG Kokott's opinion in case C-226/11 Expedia Inc [2012] ECR not yet reported

European Commission cases

Antitrust cases

British Midland/Aer Lingus (Case IV/33.544) Commission Decision 92/213/EEC [1992] OJ L96/34

BT/MCI (Case IV/34.857) Commission Decision 94/579/EC [1994] OJ L223/36

LH/SAS (Case COMP IV/35.545) Commission Decision 96/180/EC [1996] OJ L54/28

Atlas (Case IV/35.337) Commission Decision 96/546/EC [1996] OJ L239/23

Phoenix (Case IV/35.617) Commission Decision 96/547/EC [1996] OJ L239/57

Air France/Continental (Case IV/36.314) and Air France/Delta Air Lines (Case IV/36.315) [1998] OJ C325/2

British Airways/American Airlines (Case IV/36.089) [1998] OJ C239/10

SAS/Maersk Air and Sun-Air v SAS and Maersk (Case COMP.D.2. 37.444 and

COMP.D.2 37.386) Commission Decision 2001/716/EC [2001] OJ L265/15

Glaxo Wellcome (Case IV/36.957/F3), Aseprofar and Fedifar (Case IV/36.997/F3), Spain Pharma (Case IV/37.121/F3), BAI (Case IV/37.138/F3) and EAEPC (Case IV/37.380/F3) Commission Decision 2001/791/EC [2001] OJ L302/1

British Midland Ltd/Deutsche Lufthansa AG/Scandinavian Airlines System (Case COMP/38.712) [2001] OJ C83/6

AuA/LH (Case COMP/37.730) Commission Decision 2002/746/EC [2002] OJ L242/25

Visa-International Multilateral Interchange Fee (Case COMP/29.373) Commission Decision 2002/914/EC [2002] OJ L318/17

LH/UA/SAS (Cases COMP/D-2/36.201, 36.076, 36.078) [2002] OJ C264/3

KLM/NW (Case COMP/D-2/36.111) [2002] OJ C264/5

British Airways/SN Brussels Airlines (Case COMP/A.38.477/D2) [2003]

British Airways/Iberia/GB Airways (Case COMP/D2/38.479) [2003]

Air France/Alitalia (Case COMP/38.284/D2) Commission Decision 2004/841/EC [2004] OJ L362/17

BA/AA/IB (Case COMP/39.596) [2010] OJ C278/14

Air France, Aeromexico, Czech Airlines, Delta Air Lines, Korean Air (SkyTeam) (Case COMP/37.984) closed on 23 January 2012

AC/CO/LH/UA (Case COMP/39.595)

AF-KL/DL/AZ (Case COMP/39.964)

Mergers

Delta Air Lines/Pan Am (Case IV/M.130) [1991] OJ C289/14

Air France/Sabena (Case IV/M.157) [1992] OJ C272/5

British Airways/TAT (Case IV/M.259) [1992] OJ C326/16

British Airways/Dan Air (Case IV/M.278) [1993] OJ C63/5

Swissair/Sabena (Case IV/M.616) [1995] OJ C200/10

British Airways/Air Liberté (Case IV/M.857) [1997] OJ C149/25

KLM/Air UK (Case IV/M.967) [1997] OJ C372/20

Eurostar (Case IV/M.1305) [1999] OJ C256/3

SAir Group/LTU (Case IV/M.1354) [1998]

SAir/AOM (Case IV/M.1494) [1999] OJ C245/29

Airtours/First Choice (Case COMP/M.1524) [2000] OJ C93/1

SAir/SAA (Case COMP/M.1626) [2001] OJ C251/3

KLM/Alitalia (Case COMP/JV.19) [2000] OJ C96/5

Singapore Airlines/Virgin Atlantic (Case COMP/M.1855) [2002] OJ C110/8

AOM/Air Liberté/Air Littoral (Case COMP/M.2008) [2000] OJ C238/9

United Airlines/US Airways (Case COMP/M.2041) [2001]

General Electric/Honeywell (Case COMP/M.2220) [2004] OJ L48/1

Schneider/Legrand (Case COMP/M.2283) [2004] OJ L101/1

Tetra Laval/Sidel (Case COMP/M.2416) [2004] OJ L43/13

SAS/Spanair (Case COMP/M.2672) [2002] OJ C93/7

Air France/KLM (Case COMP/M.3280) [2004] OJ C60/5

Lufthansa/Swiss (Case COMP/M.3770) [2005] OJ C204/3

T-Mobile Austria/Tele.ring (Case COMP/M.3916) [2007] OJ L88/44

Lufthansa/Eurowings (Case COMP/M.3940) [2006] OJ C18/22

Ryanair/Aer Lingus (Case COMP/M.4439) [2008] OJ C47/9

TUI/First Choice (Case COMP/M.4600) [2007] OJ C137/6

KarstadtQuelle/My Travel (Case COMP/M.4601) [2007] OJ C113/1

KLM/Martinair (Case COMP/M.5141) [2009] OJ C51/4

Delta Air Lines/Northwest Airlines (Case COMP/M.5181) [2008] OJ C281/3

Lufthansa/SN Airholding (Case COMP/M.5335) [2009] OJ C295/11

Iberia/Vueling/Clickair (Case COMP/M.5364) [2009] OJ C72/23

Lufthansa/bmi (Case COMP/M.5403) [2009] OJ C158/1

LufthansaAustrian Airlines (Case COMP/M.5440) [2010] OJ C16/11

SNCF/LCR/Eurostar (Case COMP/M.5655) [2010] OJ C272/2

Iberia/British Airways (Case COMP/M.5747) [2010] OJ C241/1

Olympic/Aegean Airlines (Case COMP/M.5830) [2012] OJ C195/11

United Air Lines/Continental Airlines (Case COMP/M.5889) [2010] OJ C225/1

IAG/bmi (Case COMP/M.6447) [2012] OJ C161/2

Other Commission decisions

Viva Air (Case VII/AMA/I/93) Commission Decision 93/347/EEC [1993] OJ L 140/51

Swissair/Sabena Commission Decision 95/404/EC [1995] OJ L 239/1

Other jurisdictions

US Courts

Standard Oil Co of New Jersey v United States 221 US 1 (1911)

Chicago Board of Trade v United States 246 US 231 (1918)

United States v Trenton Potteries Co 273 US 392 (1927)

United States v Socony-Vacuum Oil Co 310 US 150 (1940)

Northern Pacific Railway Co v United States 356 US 1 (1958)

Continental TV Inc v GTE Sylvania Inc 433 US 36 (1977)

National Society of Professional Engineers v US 435 US 679 (1978)

Broadcasting Music Inc v Columbia Broadcasting System Inc 441 US 1 (1979)

NCAA v Board of Regents, 468 US 85 (1984)

NW Wholesale Stationers v Pac Stationery 472 US 284 (1985)

FTC v Indiana Federation of Dentists 476 US 447 (1986)

State Oil v Khan 522 US 3 (1997)

California Dental Association v FTC 526 US 756 (1999)

Verizon Communications Inc v Law Offices of Curtis Trinko LLP 540 US 398 (2004)

Leegin Creative Leather Products, Inc v PSKS Inc 127 S. Ct. 2705 (2007)

US Federal Trade Commission

Massachusetts Board of Registration in Optometry 110 FTC 549 (1988)

Polygram Holding, Inc In re 2003 WL 22443617 (FTC 2003)

US Department of Transportation antitrust immunity orders and applications

Northwest/KLM (Docket 46371), Order 93-1-11

United/Lufthansa (Docket OST-1996-1116), Order 96-5-27

United/Lufthansa/SAS (Docket OST-1996-1411), Order 96-11-1

United/Air Canada (Docket OST-1996-1434), Order 97-9-21

American/British Airways I (Docket OST-1997-2058), Order 99-7-22

American/LAN (Docket OST-1997-3285), Order 99-9-9

United/Air New Zealand (Docket OST-1999-6680), Order 2001-4-2

United/Austrian/Lufthansa/SAS (Docket OST-2000-7828), Order 2001-1-19

American/British Airways II (Docket OST-2001-10387 and 11029), Order 2002-4-4

Delta/Air France/Alitalia/Czech Airlines (Docket OST-2001-10429), Order 2007-5-16

United/bmi/Austrian/Lufthansa/SAS (Docket OST-2001-10575 and 11029), Order 2007-9-12

American/Finnair (Docket OST-2002-12063), Order 2002-7-30

Delta/Korean Air Lines/Air France/Alitalia/Czech Airlines (Docket OST-2002-11842), Order 2002-6-18

United/Asiana (Docket OST-2003-14202), Order 2003-5-18

Delta/Northwest/Air France/KLM/Alitalia/Czech Airlines (Docket OST-2004-19214), Order 2006-2-1

American/LAN Peru/LAN Airlines (Docket OST-2004-19964), Order 2005-10-8

United/Lufthansa/SAS/Austrian/bmi/LOT/Swiss/TAP/Air Canada (Docket OST-2005-22922), Order 2007-2-16

Delta/Northwest/Air France/KLM/Alitalia/ Czech Airlines (Docket OST-2007-28644), Order 2008-5-22

United/Brussels Airlines/Lufthansa/Air Canada/SAS/Austrian/bmi/LOT/Swiss/TAP (Docket OST 2008-0234), Order 2009-7-10

American/British Airways/Iberia/Finnair/Royal Jordanian (Docket OST-2008-0252), Order 2010-7-8

American/Japan Airlines (Docket OST-2010-0034 consolidated in OST-2010-0059), Order 2010-11-10

United/ANA (Docket OST-2010-0059), Order 2010-11-10

American/Qantas (Docket OST 2011-0111), Order 2011-11-12

Show Cause Order 2008-4-17 (Docket OST-2007-28644-0174) (SkyTeam II)

Show Cause Order 2009-4-5 (Docket OST-2008-0234-0193) (Star Alliance)

Joint Application of United Air Lines Inc and Asiana Airlines Inc for approval of and antitrust immunity for an Alliance Expansion Agreement (Docket OST-03-

14202-0001)

Joint application of Alitalia-Linee Aeree Italiane SpA, Czech Airlines, Delta Air Lines, KLM Royal Dutch Airlines, Northwest Airlines, Société Air France for approval of and antitrust immunity for alliance agreements (Docket OST-2007-28644-0001)

Joint application to amend order 2007-2-16 to approve and confer antitrust immunity on certain alliance agreements (Docket OST-2008-0234-0001)

Joint application of American Airlines, British Airways, Finnair, Iberia, Royal Jordanian Airlines for approval of and antitrust immunity for alliance agreements (Docket OST-2008-0252-0001)

Australian Competition and Consumer Commission

ACCC authorisation A30202 of 10 May 2000 on Qantas' and British Airways' application

ACCC authorisation A30211, A30212, A30213 of 4 September 2003 on Air New Zealand's application on behalf of Star Alliance

ACCC authorisation A30226 and A30227 of 8 February 2005 on Qantas' and British Airways' application

ACCC authorisation A91036, A91037, A91038, A91039, A91040 of 18 July 2007 on Singapore Airlines' application on behalf of Star Alliance

ACCC authorisation A91195 and A91196 of 31 March 2010 on Qantas' and British Airways' application

ACCC authorisation A91247&A91248 of 3 February 2011 on Virgin Blue Airlines' and others' application

ACCC authorisation A91265 and A91266 of 29 September 2011 on Qantas' and

British Airways' application

ACCC authorisation A91300, A91301, A91302, A91303, A91304, A91305 & A91306 of 27 June 2012 on Air New Zealand's application on behalf of Star Alliance

Pending ACCC case A91332 & A91333 Qantas Airways Limited & Emirates

Other

UK Competition Commission, British Airways Plc and City Flyer Express Limited, Cm 4346 (20.07.1999), a report on the proposed merger

UK Competition Commission, Air Canada/Canadian Airlines Corporation, Cm 4838 (02.08.2000), a report on the merger situations

Bundeskartellamt, B 9 – 62100-U-147/00 Beschluss in dem Kartellverwaltungs-verfahren Deutsche Lufthansa/Eurowings (19 September 2001)

Office of Fair Trading, case CP/1535-01 Notice of consultation issued pursuant to Rule 8(1)(a) of Schedule 1 of the EC Competition Law (Articles 84 and 85) Enforcement Regulations 2001 – 9 August 2002, Notification by British Midland and United Airlines of their Alliance Expansion Agreement

Autorità garante della Concorrenza e del Mercato, Provedimento n. 12185 Alitalia/Volare (10 July 2003)

New Zealand Commerce Commission, Final Determination, Determinations pursuant to the Commerce Act 1986 in the matter of an application for authorisation of a business acquisition and in the matter of an application for authorisation of certain restrictive business practices and involving: Air New Zealand and Qantas Airways Limited, 23 October 2003

Bundeskartellamt, B 9 – 67/07 Beschluss in dem verwaltungsverfahren Air Berlin/LTU (7 August 2007)

Bundeskartellamt, B 9 – 56/09 Beschluss in dem verwaltungsverfahren TUI/Air Berlin (4 September 2009)

Canadian Competition Tribunal, case CT-2011-004 The Commissioner of Competition v Air Canada, United Continental Holdings Inc, United Airlines Inc, and Continental Airlines Inc

Tribunal de Defensa de la Libre Competencia (Chile), case NC-388-11, Decision Nº 37/2011

Table of international agreements

International Air Services Transit Agreement (7 December 1944)

International Air Transport Agreement (7 December 1944)

Andean Open Skies Pact (16 May 1991)

Agreement between the European Economic Community, the Kingdom of Norway and the Kingdom of Sweden on civil aviation [1992] OJ L200/21

Agreement on the European Economic Area [1994] OJ L1/3

Agreement among Director General of Civil Aviation of Cambodia, Laos, Myanmar and Vietnam on the Establishment of Sub-regional Air Transport Cooperation (14 Jan 1998)

Agreement between the European Community and the Swiss Confederation on Air Transport [2002] OJ L114/73

Pacific Islands Air Services Agreement (16 August 2003)

Multilateral Agreement between the European Community and its Member States, the Republic of Albania, Bosnia and Herzegovina, the Republic of Bulgaria, the Republic of Croatia, the former Yugoslav Republic of Macedonia, the Republic of Iceland, the Republic of Montenegro, the Kingdom of Norway, Romania, the Republic of Serbia and the United Nations Interim Administration Mission in Kosovo on the Establishment of a European Common Aviation Area (ECAA) [2006] OJ L285/3

Euro-Mediterranean Aviation Agreement between the European Community and its Member States, of the one part and the Kingdom of Morocco, of the other part [2006] OJ L386/57

Air Transport Agreement between the European Community and its Member States, on the one hand, and the United States of America, on the other hand [2007] OJ

L134/4

Agreement on Air Transport between Canada and the European Community and its Member States [2010] OJ L207/32

Decision of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 15 October 2010 on the signature and provisional application of the Common Aviation Area Agreement between the European Union and its Member States, of the one part, and Georgia, of the other part 2011/50/EU [2011] OJ L25/1

Euro Mediterranean Aviation Agreement between the European Union and its Member States, of the one part, and The Hashemite Kingdom of Jordan, of the other part

Table of legislation

European Union

Council / Parliament and Council Regulations

EEC Council: Regulation No 17: First Regulation implementing Articles 85 and 86 of the Treaty [1963] OJ 013/204

Council Regulation (EEC) 3975/87 of 14 December 1987 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector [1987] OJ L374/1

Council Regulation (EEC) 3976/87 of 14 December 1987 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector [1987] OJ L374/9

Council Regulation (EEC) 2342/90 of 24 July 1990 on fares for scheduled air services [1990] OJ L217/1

Council Regulation (EEC) 2343/90 of 24 July 1990 on access for air carriers to scheduled intra-Community air service routes and on the sharing of passenger capacity between air carriers on scheduled air services between Member States [1990] OJ L217/8

Council Regulation (EEC) 2344/90 of 24 July 1990 on the application of Article 85 (3) of the treaty to certain categories of agreements and concerted practices in the air transport sector [1990] OJ L217/15

Council Regulation (EEC) 294/91 of 4 February 1991 on the operation of air cargo services between Member States [1991] OJ L36/1

Council Regulation (EEC) 1284/91 of 14 May 1991 amending Regulation (EEC) 3975/87 laying down the procedure for the application of the rules on competition to

undertakings in the air transport sector [1991] OJ L122/2

Council Regulation (EEC) 2407/92 of 23 July 1992 on licensing of air carriers [1992] OJ L 240/1

Council Regulation (EEC) 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes [1992] OJ L 240/8

Council Regulation (EEC) 2409/92 of 23 July 1992 on fares and rates for air services [1992] OJ L 240/15

Council Regulation (EEC) 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports [1993] OJ L14/1

Council Regulation (EC) 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1

Council Regulation (EC) 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1

Council Regulation (EC) 411/2004 of 26 February 2004 repealing Regulation (EEC) 3975/87 and amending Regulations (EEC) 3976/87 and (EC) 1/2003, in connection with air transport between the Community and third countries [2004] OJ L68/1

Parliament and Council Regulation (EC) 847/2004 of 29 April 2004 on the negotiation and implementation of air service agreements between Member States and third countries [2004] OJ L157/7

Parliament and Council Regulation (EC) 1008/2008 of 24 September 2008 on common rules for the operation of air services in the Community [2008] OJ L 293/3

Parliament and Council Regulation (EC) 80/2009 of 14 January 2009 on a Code of Conduct for computerised reservation systems and repealing Council Regulation (EEC) 2299/89 [2009] OJ L35/47

Commission Regulations

Commission Regulation (EEC) 1983/83 of 22 June 1983 on the application of Article 85 (3) of the Treaty to categories of exclusive purchasing agreements [1983] OJ L173/5

Commission Regulation (EEC) 1984/83 of 22 June 1983 on the application of Article 85 (3) of the Treaty to categories of exclusive distribution agreements [1983] OJ L173/1

Commission Regulation (EEC) 2671/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings, decisions of associations of undertakings and concerted practices concerning joint planning and coordination of capacity, sharing of revenue and consultations on tariffs on scheduled air services and slot allocation at airports [1988] OJ L239/9

Commission Regulation (EEC) 2672/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings relating to computer reservation systems for air transport services [1988] OJ L239/13

Commission Regulation (EEC) 2673/88 of 16 December 1988 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings, decisions of associations of undertakings and concerned practices concerning ground handling services [1988] OJ L239/17

Commission Regulation (EEC) 82/91 of 5 December 1990 on the application of Article 85 (3) of the Treaty to certain categories of agreements, decisions and concerted practices concerning ground handling services [1991] OJ L10/7

Commission Regulation (EEC) 83/91 of 5 December 1990 on the application of Article 85 (3) of the Treaty to certain categories of agreements between undertakings relating to computer reservation systems for air transport services [1991] OJ L10/9

Commission Regulation (EEC) 84/91 of 5 December 1990 on the application of

Article 85 (3) of the Treaty to certain categories of agreements, decisions and concerted practices concerning joint planning and coordination of capacity, consultations on passenger and cargo tariffs rates on scheduled air services and slot allocation at airports [1991] OJ L10/14

Commission Regulation (EC) 2790/1999 of 22 December 1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices [1999] OJ L336/21

Commission Regulation (EC) 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements [2000] OJ L304/7

Commission Regulation (EC) 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements [2000] OJ L304/3

Commission Regulation (EC) 1400/2002 of 31 July 2002 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices in the motor vehicle sector [2002] OJ L203/30

Commission Regulation (EC) 772/2004 of 27 April 2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements [2004] OJ L123/11

Commission Regulation (EC) 622/2008 of 30 June 2008 amending Regulation (EC) 773/2004, as regards the conduct of settlement procedures in cartel cases [2008] OJ L171/3

Commission Regulation (EU) 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices

Commission Regulation (EU) 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the functioning of the European Union to categories of research and development agreements [2010] OJ L335/36

Commission Regulation (EU) 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty to categories of specialisation agreements [2010] OJ L335/43

Commission Regulation (EU) 461/2010 of 27 May 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices in the motor vehicle sector [2010] OJ L129/52

Directives

Council Directive (EEC) 83/416 of 25 July 1983 concerning the authorization of scheduled inter-regional air services for the transport of passengers, mail and cargo between Member States [1983] OJ L237/19

Council Directive (EEC) 87/601 of 14 December 1987 on fares for scheduled air services between Member States [1987] OJ L374/12

Council Directive (EC) 96/67 of 15 October 1996 on access to the groundhandling market at Community airports [1996] OJ L272/36

Parliament and Council Directive 2009/12/EC of 11 March 2009 on airport charges [2009] OJ L 70/11

Other

Council Decision (EEC) 87/602 of 14 December 1987 on the sharing of passenger capacity between air carriers on scheduled air services between Member States and on access for air carriers to scheduled air-service routes between Member States [1987] OJ L374/19

United States

Interstate Commerce Act of 1887, 24 Stat. 379

Motor Carrier Act of 1935, P.L. 74-255, 49 Stat. 543

Communications Act of 1934, P.L. 416, 48 Stat. 1064

Natural Gas Act of 1938, P.L. 75-688, 52 Stat. 821

Civil Aeronautics Act of 1938, P.L. 706, 52 Stat. 973